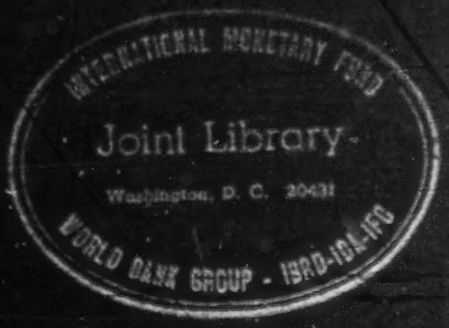
Ceylon. Ministry of planning and employment

THE FIVE YEAR PLAN

1972—1976



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FOREWORD

IN May 1970 the people gave a mandate to the United Front Government to develop all branches of the economy at a rapid rate and according to a national plan in order to lay the foundations for a further advance towards a socialist society. The Five Year Plan which is now presented seeks to translate that mandate into a concrete programme of action.

It is presented at a time of grave social and economic crisis. The problem of unemployment which has festered within the economy for many years is now crying out for solution. Misguided and short-sighted economic policies have led to huge increases in our national debt, both domestic and foreign, while leaving the major problems of the country unsolved. The shortage of foreign exchange has crippled the growth of the economy and created many scarcities.

In the course of the preparation of the Five Year Plan, the question has come up over and over again : Must our country always remain poor ? Must our youth always remain without the prospect of securing a means of livelihood, of making their contribution to society ? Our country is blessed with a fertile soil, abundant natural resources and an educated population. Yet we depend on other countries for our food and essential requirements. While land and labour remain idle, we wait for the next ship to come to harbour. We import our cloth while our factories and powerlooms and hand-looms remain unused. And what is worse, we do all this on credit which future generations have to pay.

Is there no way of getting out of this situation—of raising our heads as an independent people, of producing most of what we want ourselves, of finding employment for the thousands of young men and women who join the ranks of the unemployed each year ?

It is to these questions that the Five Year Plan has addressed itself. One thing, however, can be said at the outset. It is the failure to understand the nature of our problems and the failure to plan the organisation of our resources according to a set of clearly defined objectives which have left this country in such a helpless situation as she is today.

The Five Year Plan attempts to analyse our problems, to understand their causes and to evolve appropriate programmes and policies. The present document is a summary of these programmes and policies in the major sectors of the economy. Detailed programmes for each sector will be issued within the coming months.

As the Plan clearly shows, a drastic change in economic policies has become necessary. It is necessary to break away from past policies. Such policies have only created stagnation and frustration, and led the country into a blind alley. Only new policies and new attitudes can show the way out and lay the foundations for a better future.

I need only mention here what seems to me the most important of the new policies. In the first place, there must be a greater emphasis in the pattern of national expenditure on investments that build up the productive capacity of the economy and its capacity to provide employment to the people. Secondly, it is necessary to understand the role of prices in the economic system. While on the one hand prices are what we pay when we buy goods they also constitute the incomes of those who produce them. Thus, if we want chillies to be grown the people must be prepared to pay a price which will bring a fair income to the grower of chillies. And the same is true of many other things which we can produce ourselves, but continue to bring from abroad thus depriving our people of employment and incomes.

These basic changes mean that for the next few years the country will have to put up with some hardship and make some sacrifices for the sake of solving our national problems. Those who are fortunate must think of their less fortunate countrymen ; those who are employed must think of the thousands who are unemployed. We must lay the foundations for economic growth in the next two or three years, in order to build a prosperous Ceylon and to ensure a better future for the thousands of young men and women who are today denied the opportunity of employment.

The Government realises and the people, too, must realise that we cannot expect today's crisis to be overcome by policies of self-deception. We cannot have a good life without plentiful production. We cannot afford to consume today all that we produce without

making provision for the future. That was the policy of the past and that policy has clearly failed. We cannot continue merely to alleviate poverty without taking steps to attack its causes. We cannot concentrate on welfare measures while neglecting economic development. We must build up the economy to increase our production, to increase employment and to raise standards of living. It is to these tasks that the nation must dedicate itself.

The social framework in which the Five Year Plan will be implemented is that embodied in the Common Programme of the Sri Lanka Freedom Party, the Lanka Sama Samaja Party and the Ceylon Communist Party, which programme was overwhelmingly endorsed by the people in May 1970.

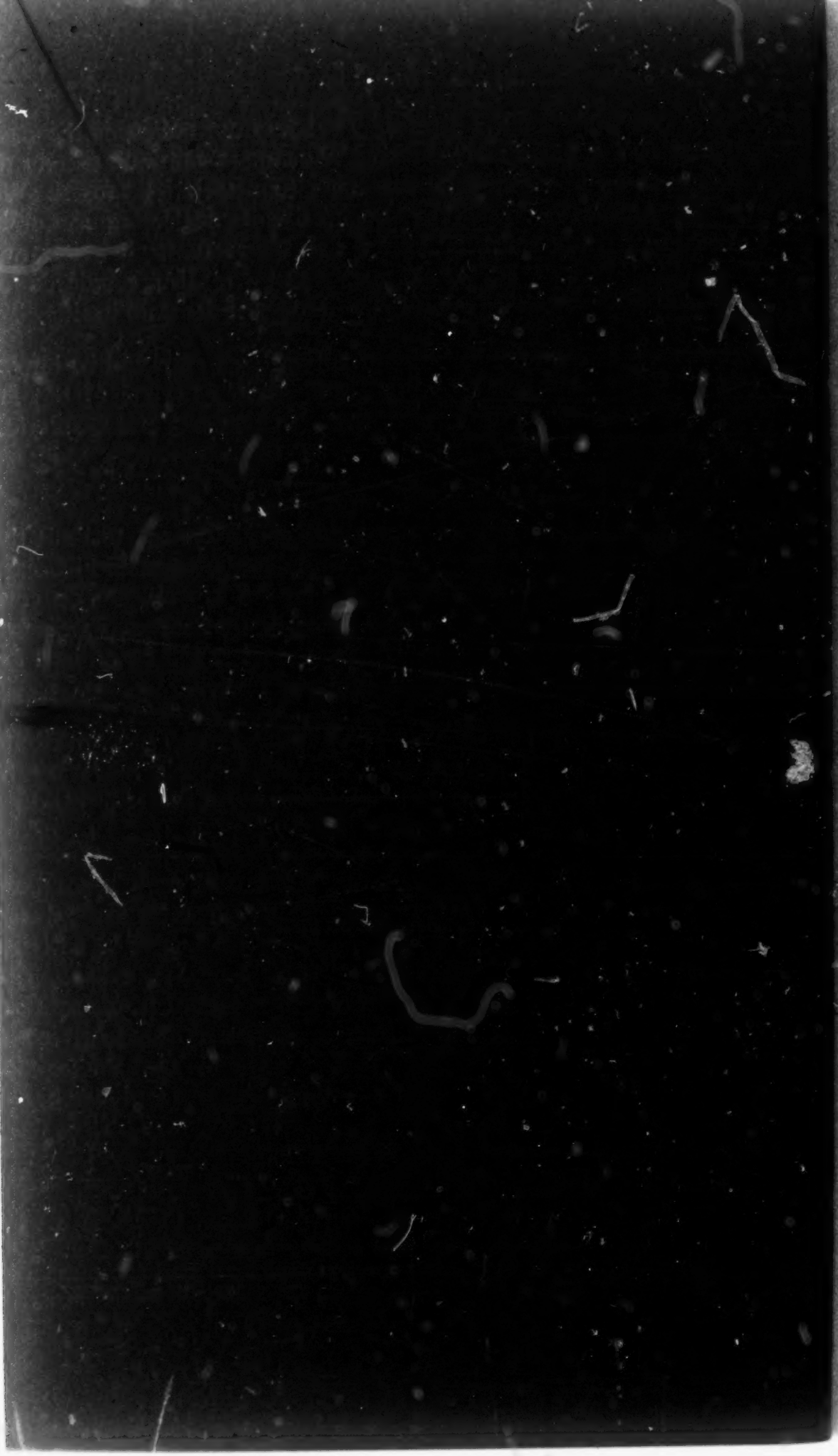
Legislation will be shortly introduced in Parliament to limit the ownership of land in order to relieve acute landlessness and increase national productivity. At the same time the expenditure on consumption of high income groups will be limited through stringent taxation and compulsory savings. Such savings will be utilized for national development both by the public and private sectors.

The private sector will be given every encouragement to contribute to national development subject to social controls necessary to prevent profiteering, foreign exchange abuses and the concentration of economic power.

In placing the Plan before the people I call upon my fellow countrymen to rally round its programme and policies and salvage the country from its present plight. The building of a socialist democracy requires the unremitting effort of the entire nation. The Five Year Plan shows a way out but it involves patriotism, sacrifice, hard work and devotion to duty from every one of us. I commend the Five Year Plan to the nation in the knowledge that the people, as they have done many times before in our history, will face harsh realities and overcome them.

Sirimavo R. D. Bandaranaike

PRIME MINISTER.



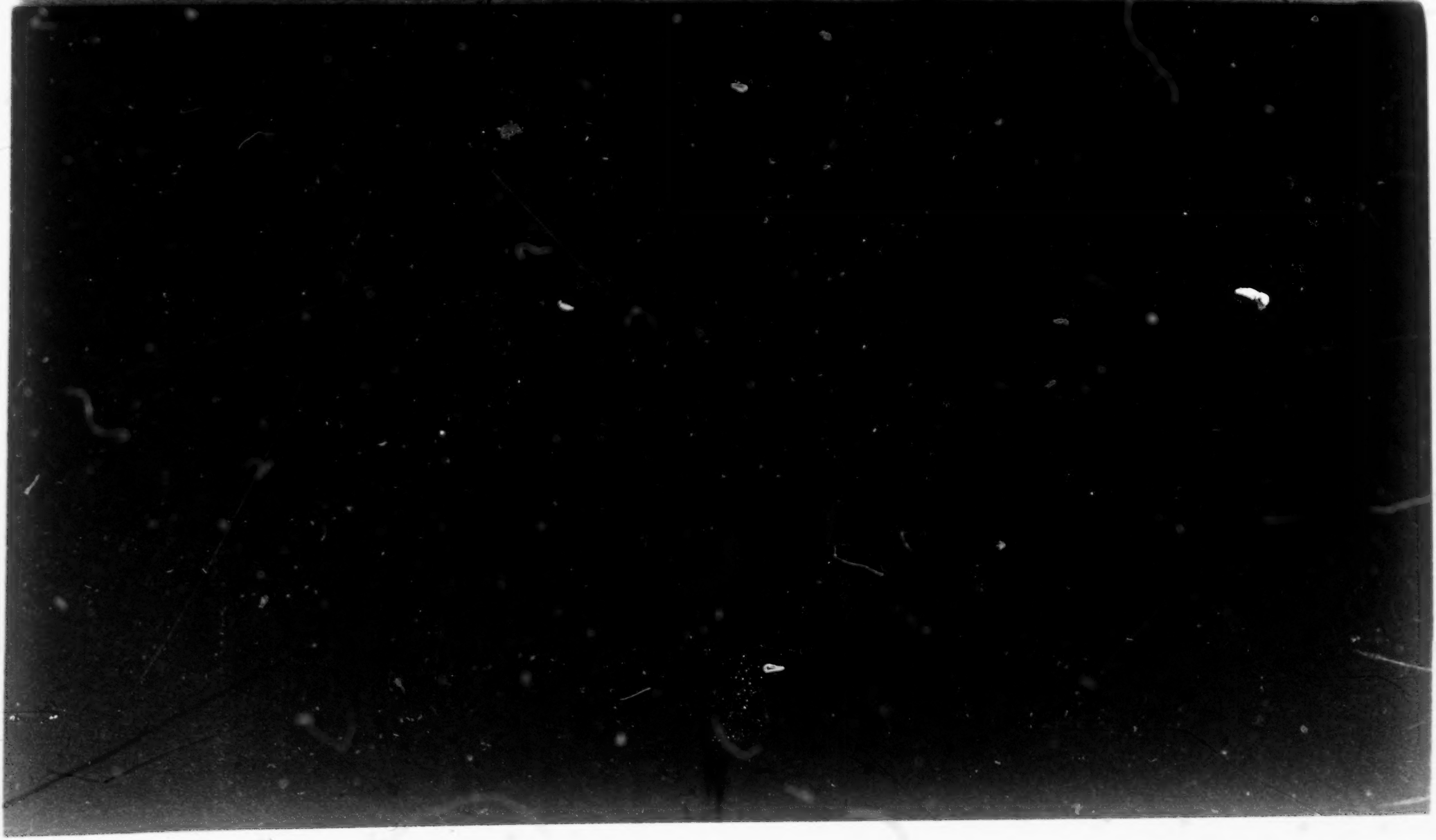
INTRODUCTORY NOTE

THE Five Year Plan is a summary of the programmes of development that have been prepared for the major sectors of the economy. It has been written in the hope that it will be widely read and discussed by all sections of the public. Therefore the focus of this document is on the major programmes and the policies that are needed. The detailed sectoral programmes will be issued in the coming months.

It has to be emphasised that the Plan is only a broad framework within which the development effort will be directed. Programmes and policies will have to be adapted from year to year according to the particular problems which arise during the implementation of the Plan. It is necessary for the people to participate in this task. In this context it is essential that there should be widespread discussion of the objectives, strategy and programmes in the Plan by various organisations such as Trade Unions, Employees' Councils, Divisional Development Councils, Business Enterprises, Co-operative Societies, Schools and Universities.

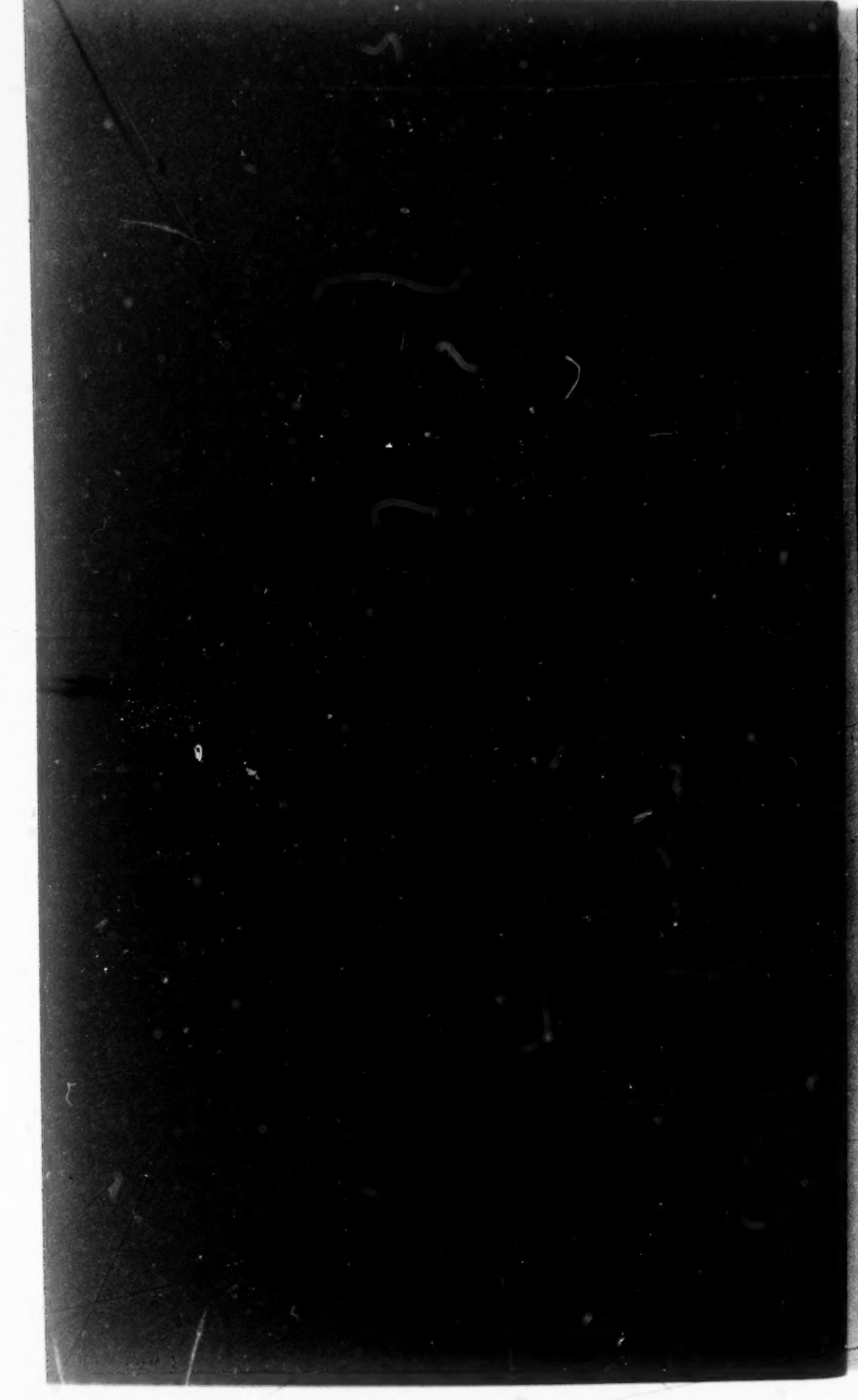
The present document is the result of the co-operative effort of a large number of persons in the different ministries and departments of the Government. Numerous trade union officials, members of the Divisional Development Councils and members of the public have also given this Ministry the benefit of their advice.

Ministry of Planning and Employment,
Colombo 1, November, 1971.



CONTENTS

	Page
FOREWORD	i
INTRODUCTORY NOTE	v
Chapter	
1. OBJECTIVES AND STRATEGY	1
2. PLAN FRAMEWORK	22
3. AGRICULTURE, FORESTRY AND FISHERIES	33
4. INDUSTRY	59
5. ECONOMIC OVERHEADS	82
6. EXPORT PLAN	93
7. SOCIAL OVERHEADS—	
(A) EDUCATION AND MANPOWER	109
(B) HEALTH	113
(C) HOUSING	122
8. IMPLEMENTATION OF THE PLAN	128



CHAPTER 1

OBJECTIVES AND STRATEGY

Introduction

THE Five Year Plan is presented at a time of social and economic crisis unparalleled in the history of modern Ceylon.

The worsening foreign exchange situation and the continued growth of the numbers unemployed, which were becoming increasingly evident during the course of the last decade, have today reached crisis proportions. This calls for an urgent reappraisal of the basic objectives and strategies of development.

The purpose of a national plan is to organise the utilization of the human and material resources of the country to the best advantage of the nat on as a whole. It provides a framework within which the countless decisions regarding economic activity made by government ministries and departments, public corporations, private businesses, households and individuals might be co-ordinated in the context of a system of national priorities.

The content of a plan and the strategy adopted are both conditioned by the social and economic objectives that a country seeks to achieve. While the Five Year Plan attempts to formulate programmes and policies designed to achieve the maximum development of national resources, it must do so within a social framework consistent with the country's commitment to a rapid advance towards a socialist society. The objectives of the Plan derive directly from the socialist aspirations of the masses which elected the present Government into power in May 1970.

It is customary to measure the economic development of a country by statistics of its Gross National Product. Per capita real incomes grew by roughly 2·1 per cent per year during the period 1959 to 1970. However, such national income statistics are an inadequate measure of development, especially when the fundamental problems of the economy remain unresolved. The trend in Gross National Product does not indicate the growing crisis in employment, in income disparities and in the balance of payments. Statistics of Gross

National Product and per capita income are insensitive both to the distribution of income and to the virtual stagnation of certain vital sectors of the economy. Nor do these statistics indicate the maturing crisis within society.

The Socio-Economic Survey of 1969–70 indicated that 40 per cent of the households in Ceylon earn less than Rs. 200 per month. A further 40 per cent of the households earn between Rs. 200 and Rs. 400 per month. While the immediate social objective of the Plan is to provide employment, it also aims to bridge the present disparities in incomes and living standards by raising the incomes and living conditions of the low-income households. It also seeks to eliminate the grosser forms of wasteful consumption which have become a conspicuous feature of present-day Ceylon, by stringent taxation of those in the higher income groups, and by the limitation of current expenditures. Those who, either through the inheritance of property or through the ownership of the means of production or other circumstances, are today enjoying standards of living out of all proportion to what the country can afford will have to alter their consumption habits drastically in the interests of the country's development.

Within these broad social objectives the Plan places heavy stress on a significant advance on the economic front. Indeed the two are interrelated. Redistribution alone cannot improve the living standards of the poorer groups in society. There has to be economic growth. As the following table shows there are wide differentials in the consumption of certain essential items of food in the people's diet.

Table 1

AVERAGE EXPENDITURE (RS.) PER CAPITA ON PROTEIN FOOD FOR TWO MONTHS

Income Group of Spending Unit	*Meat*	*Fish*	*Eggs*	*Milk and Milk Products*
0 — 50	·71	2·45	·24	·48
50 — 100	·73	2·72	·17	·78
101 — 200	·96	2·82	·22	·84
201 — 400	1·71	3·25	·42	1·45
401 — 800	3·12	3·81	1·03	2·55
801 — 1600	4·50	4·28	2·12	5·15
1601 — 2000	8·18	6·81	5·46	8·67
2001 — 3000	8·37	7·49	7·00	13·21
Over 3000	12·36	7·14	6·95	8·09

Source : "Survey of Consumer Finance, 1963" — Part II (Central Bank of Ceylon)

The differentials indicate not only the low incomes and the inability of some groups to buy an adequate quantity of such food, but also the low level of domestic production of these items. A redistribution of incomes will not lead to an increase in consumption unless more is produced in the country. Thus if social justice is to have any meaningful impact in raising the standards of living of the poorer sections of the community there must be economic development. In practical terms, this means producing more milk, developing the fishing industry, growing new types of food crops, rehabilitating the coconut industry, producing a wide range of mass consumer goods and generally raising the level of production. Similarly, the Socio-Economic Survey of 1969–70 indicated that 31 per cent of households in Ceylon did not have any sort of latrine while another 40 per cent had only the use of a cesspit. It would seem from these figures that high priority should be given to providing these facilities. But the costs of providing these are very high especially in urban areas where sewerage systems and pipe-borne water are essential. Only a few such projects can be started because of a shortage of capital and foreign exchange. It is only general economic advance which will make it possible to provide these facilities to all households.

On the other hand, there can be no significant economic development in Ceylon unless there is an immediate change in the framework of social relations. The full energies of the masses must be harnessed for the tasks of national reconstruction. However, the controls exercised by a few privileged groups in key sectors of the economy have deprived the masses of participation and involvement in these tasks. The existence of privilege in any form whatsoever is at variance with the socialist aspirations of the people. The most important source of privilege today lies in the ownership of land and property. Thus land reforms, ceilings on the ownership of house property, and measures for the social ownership or the social control of industry and commerce form an essential part of the socio-economic framework envisaged in the Plan.

In recent years, the younger generation has been gradually alienated from society. This has crucial consequences for social stability and economic development particularly as over 50 per cent of the population are below twenty one. While the more privileged amongst them are striving to imitate the customs and habits of the affluent world, the under-privileged youth find that society is unable to

offer them a meaningful role. Thus the economic programme to be framed has to give the highest priority to the needs of this generation if it is to preserve a social fabric based upon the values of a democratic society.

But it is not only the tensions in society which demand changes in the socio-economic framework. Any significant economic advance will lead to an expansion in domestic purchasing power. Such increases in purchasing power have to be directed towards commodities which can be economically produced in this country. Redistributive measures can achieve this by changing the consumption structure of the country. Today the conspicuous consumption of a highly privileged class is tending to distort the values of job seekers in a manner which has far-reaching implications. For it has to be recognised that the levels of living of this class can no longer be the model on which the aspirations of the younger generation can be based. For even with a very high rate of economic growth the economy will not in the foreseeable future be able to underpin consumption on this scale.

Unemployment

Today there are about 550,000 persons unemployed out of a labour force of 4·5 million—a rate of over 12 per cent which is high by any standard.

According to statistics of recent years, it has been found that every year about 120,000 additional persons seek employment. On the other hand, the economy has been providing employment only to about 100,000 persons per year. Thus the backlog of unemployment has been steadily increasing. The problem that faces the country, therefore, is to devise and implement a programme for the development of our national resources to employ not only the young men and women who reach working age each year but also those who have failed to get jobs in the past.

Why is it that this large number of people, about 12 per cent of the country's work force are unemployed ? The simple and obvious answer is that the economy has not developed rapidly enough in order to absorb the annual increase in the population of working age. Sufficient money has not been invested in order to develop

agriculture, to develop fisheries, to set up large and small-scale industries, and to create employment opportunities in the numerous other sectors of the economy.

The present unemployment situation is a direct reflection of past investment policies which almost totally ignored the need for creating employment. This was evident in the industrial sector, where there was no attempt to utilise labour-intensive methods of production. On the contrary, several large-scale projects of a capital-intensive nature were permitted in both the public and private sectors which competed with and stifled already established small-scale production units. Even in the construction of buildings and irrigation works when labour-intensive techniques were feasible there was no conscious attempt to use them.

The unemployment problem was also further complicated by another factor. According to the Labour Force Survey of 1968 carried out by the Department of Census and Statistics, over 25 per cent of the unemployed comprised persons who had passed at least the G. C. E. (O) Level. The most sought after jobs were white-collar jobs. This reflected to a considerable degree the inadequacy of the educational system which geared people to desk-type occupations and discouraged initiative and enterprise, and led to a perpetual search for employee status, particularly in the Government sector. The number of white-collar jobs which an economy can sustain depends on the growth of the productive sectors of the economy. It depends essentially therefore on the growth of agriculture and industry and fisheries.

The present type of education has also placed a premium on examinations, degrees and diplomas rather than on the development of skills so necessary for economic development. Thus today in nearly all sectors, there is a tendency to depend on foreign technical skills and resources and the foreign expert, and foreign aid has become a substitute for the development of indigenous skills and resources. The present divorce of education from the world of work has uprooted an entire generation from the type of production which can be readily developed in the country and has pushed the person who would normally have gone into some productive activity into a fruitless search for white-collar employment, the expansion of which can no longer be supported by the country's productive sectors.

What then are the essential elements of a programme for national development ? The fundamental requirement of such a programme is that the country as a whole should plan to save as much as possible out of its national income for the purpose of developing and expanding the economic system. This would expand the production capacity of the economy as well as create employment opportunities, thus laying the foundations for a rise in the standard of living of the people.

During the last decade the nation has been spending on the average about 88 per cent of its annual income on consumption. Only about 12 per cent was devoted to maintaining and increasing productive capacity. However, if the economy is to develop as rapidly as the situation demands, it is necessary to increase the rate of saving considerably.

Savings, Investment and Government Fiscal Operations

The capacity of any country to expand its productive base depends crucially on its ability to save a part of its annual income for investment in the means of production. During the period 1959-69 domestic savings averaged about 12 per cent of Gross Domestic Product while investment averaged 17 per cent of Gross Domestic Product. The resulting gap in the savings effort was met by foreign loans.

There are several reasons for this low rate of saving. Owing to their low incomes the ability to save of a large percentage of the population is limited. The low rate of saving is also a reflection of a society geared to a high consumption pattern relative to resources.

In a situation where private savings is low because of the low incomes of the mass of the population, it becomes essential for government to generate a sufficient level of savings out of its revenue to finance development activity. Savings in the government sector were limited on account of the trend in current expenditure and the inability of public sector enterprises to generate any sizeable surpluses. Over the last decade the current expenditure of government rose from Rs. 1,607 million to Rs. 2,850 million. Out of this increase of Rs. 1,243 million, Rs. 530 million or nearly 43 per cent was accounted for by the increase in expenditure on education, health and food subsidies. During the same period the overall

deficit in the government budget increased from Rs. 500 million in 1960–61 to Rs. 1,150 million in 1969–70. There were several features in this deficit as well as the financing of it which hastened the economic crisis which the country faces today. In most years, government revenue was not sufficient to yield an adequate surplus over its current expenditure with the result that government had to use borrowed funds to finance almost the whole of its capital expenditure. When the government's expenditure is more than its revenue it has to resort to borrowing. When the funds thus borrowed come out of the savings of individuals, firms and institutions and thus reduce their capacity to spend on consumer goods no problem is created. However, when such borrowings are from banks a problem arises if such funds are not the savings of consumers but mere book entries to place funds at the disposal of government. This type of book entry operation can release more money than is matched by the availability of goods and services. In such a situation two things can happen :—

—the scarcity of goods can be met by imports if sufficient foreign resources are available. The precipitous decline in our external assets since 1959 is explained by the operation of this factor ;

—where the shortage of foreign exchange compels stringent import restrictions, the pressure of demand on a limited volume of goods leads to an increase in prices, a rise in living costs and the emergence of black-marketeers, racketeers and profiteers. It is clear that we are now in the second phase.

This situation reflects the serious inadequacy of budgetary policies for generating savings and mobilising resources for investment. More specifically the Government budget should have a substantial surplus of revenue over current expenditure so that such savings could be directed into public sector investment. Past policies have to be drastically revised.

Although the present situation leaves little room for manoeuvre, any meaningful improvement in the conditions of the mass of the people cannot be achieved unless the country's rate of saving increases. Ceylon can no longer continue on a path where consumption and the style of living of the whole nation are geared to the aspirations and motivations of a bygone era fashioned on the needs and desires of a privileged group.

The Foreign Exchange Problem

The inadequacy of resources for investment is partly the result of the low rate of saving. It is also the result of the serious shortage of foreign exchange.

The widening gap in the balance of payments which was a feature of the past decade assumed major proportions during the latter half of the period. In 1969 and 1970 the external resource gap (the difference between total foreign exchange earnings and total foreign exchange payments) exceeded Rs. 1,100 million, which was about 50 per cent of the country's total foreign exchange earnings. This was in sharp contrast to the situation in the earlier half of the decade when the external resource gap ranged between Rs. 125 million and Rs. 350 million.

A major reason for this imbalance was the virtual stagnation of total export earnings during this period. This reflected on the one hand the marked decline in tea and rubber prices which adversely affected the earnings from these exports in spite of overall increases in volume. On the other hand, in spite of a general increasing trend in the export prices of coconut products especially during the latter part of the period, export earnings did not increase owing to the decline in production. Further, no attempt was made during this period to diversify the structure of exports b introducing new crops and new products which might to so extent have offset the effect of these developments.

Total import payments however continued to increase during this period. This was most marked during 1968 and 1969. The major factor contributing to this increase was a rise in all import prices during the latter half of the decade. Import prices in general rose by about 33 per cent during the period 1964 to 1970 while the price of investment goods rose by as much as 57 per cent.

Further, the policy of general import restrictions during this period was not applied to food which was one of the major items in the import bill. Food imports continued to expand adding to the pressure on the balance of payments. Thus the immense scope for growing our own food remained for the most part unexploited except in the case of paddy. In addition, the approval of domestic industries, without a clear definition of national priorities and also without a definite policy of emphasising the use of domestic raw materials

had the effect of increasing the import bill for raw materials. The situation was further aggravated by the liberalisation of the imports of raw materials under Open General Licence, which was introduced with the FEECS Scheme in May 1968. The relaxation of controls also led to an increase in imports which were used for the production of non-essential and luxury items. Further, the manner in which the scheme was administered permitted the import of a variety of trivial, non-essential consumer items.

The growing foreign exchange gap was financed by resort to external borrowings. As the balance of payments crisis deepened and the external resources gap increased, government had greater recourse to short-term borrowing adding further immediate burdens on account of debt servicing. The foreign debt increased from Rs. 374 million in 1964 to Rs. 1,551 million in 1970. In each of the years 1969 and 1970 the external resource gap of over Rs. 1,100 million was financed to the extent of over Rs. 600 million by short-term borrowings. In 1970 the situation was such that more than 65 per cent of the gross borrowings of Rs. 1,124 million was required for servicing and repayment of debts.

The following table indicates that out of the country's foreign exchange earnings in 1970 nothing was left for investment in development.

Table 2

FOREIGN EXCHANGE EARNINGS AND EXPENDITURE ON SELECTED ITEMS—1970 (RS. MILLION)

1. Total foreign exchange earnings	2,264
2. Imports—	
(*a*) Food	1,069
(*b*) Textiles	124
(*c*) Drugs	29
(*d*) Other consumer goods	72
(*e*) Intermediate goods	451
3. Debt servicing (Capital repayments and interest on all foreign debt)	757
4. Total of items (2) to (3)	2,502

In fact, after servicing the foreign debt the foreign exchange remaining was insufficient to buy the essential requirements listed above, let alone import the machinery and other capital goods necessary for economic development. This is at the heart of the economic crisis confronting the country.

In this situation it is not possible for the country to continue with the policies of the past—to spend more than it is earning and to continue indefinitely increasing the foreign debt. The crippling burden of debt repayments together with the existing imbalance between imports and exports must necessarily exercise a dominating influence on the choice of a strategy for the Plan. The essential elements of this strategy would consist of measures to economize on foreign exchange, to increase import-substitution, and to develop new agricultural and industrial exports.

Strategy

The choice of a strategy in the present context of the Ceylon economy must be governed by two basic considerations. Firstly, there is the need to take into account the long-term trends in population growth. The population is expected to grow to at least 15 million in 1980 and at the very least to 20 million in the year 2000. It would be quite simple, as has been done in the past, to ignore entirely the fate of a future generation. Yet, no serious planning effort can afford to do this. Secondly, the immediate and pressing problems of the economy such as unemployment and the balance of payments, demand urgent attention.

These two conflicting objectives have to be reconciled within the limits set by the availability of resources. When the major problem of the economy is its inability to provide sufficient employment for the existing labour force, investment policies must be geared to solving this problem in the shortest possible time. However, even the foundation for long-term growth cannot be laid upon the present unstable and precarious economic base. It is necessary therefore that the present Five Year Plan should aim at correcting these serious imbalances that exist in the economy.

A necessary condition for long-term growth is a heavy investment programme on certain types of basic industries, on major irrigation and multi-purpose river valley projects, on electrification and transport development. The development of basic industries such as steel, machine tools and chemicals, cement and glass are necessary to feed a wide range of light industries. Multi-purpose river valley

projects are needed to increase the area of land under cultivation, to provide land for the development of new crops, and also to supply the electricity necessary for the rapid expansion of industry. These are all necessary if the economy is to maintain a sustained rate of growth over the years. But emphasis only on the long-term aspects of growth can lead to social imbalances and dislocations which can do irremediable harm to the growth of a reasonably stable society. The possible point of conflict between long-term and short-term policies arises with regard to the problem of employment. When the country is faced with an unemployment problem of the present magnitude all other considerations must necessarily be subordinate. As has been pointed out earlier, about 25 per cent of these unemployed have passed at least the G.C.E. (O) Level Examination. Present social tensions are due not only to the frustration of those unemployed but also to the despair of students at present in the educational system.

A balance has to be struck between the demands of long-term growth and the demands consequent to the present social crisis. The investment programme proposed in the Plan attempts to achieve this. It gives the highest priority to raising the social and economic conditions of the vast mass of the population by the creation of employment opportunities geared to increased production. In regard to the balance of payments, it adopts a strategy which will rescue the country from its present predicament and establish an increasingly self-reliant base for future growth.

The social and economic objectives upon which the Plan is based can be listed as follows :—

(1) to carry through the structural changes in the economy necessary for long-term growth. This means investment in basic industries which can provide the inputs for other industries, the growing of new types of crops and the creation of entirely new sectors in industry and agriculture based on non-traditional commodities. It is necessary to understand that this transformation is not only an investment operation but also involves modernisation of small-holding agriculture, attracting the young to agriculture, training highly skilled personnel to man the new industrial plants, and building the the infrastructure in skills necessary to support a major export drive ;

(2) to implement the short-term measures necessary to correct the growing imbalances in the economy—in particular, the widening gap in the balance of payments and the increasing numbers of the unemployed ;

(3) to reduce social tensions by the elimination of wasteful consumption and by redistributive measures ;

(4) to raise the living standards of the low-income groups by improving housing and sanitary facilities. Also to raise nutrition levels of these groups especially by increasing the production of essential food items such as fish, milk, eggs and fruits and by gearing the production of consumer goods to the needs of the masses ;

(5) to take measures to regenerate rural society and to make it more attractive to the young by modernising agriculture and by siting agro-based industries in rural areas.

Given these objectives, the question is raised as to the optimum strategy to be adopted to reach these goals. How far the country will be able to move along this road depends on the major constraints that are now operative—the shortage of foreign exchange and the inadequacy of savings. It also depends crucially on the manner in which the people respond to the challenge posed in the carrying out of the Plan.

In the analysis of the present crisis the decline of foreign exchange earnings as a major causal factor has not been under-estimated. However, it has to be emphasised that domestic economic policies too are responsible for the present malaise. The available capital has not been put to the best use. Land has not been used efficiently. The lack of intensive cultivation as well as inefficient cultivation have led to the waste of natural resources. As has been mentioned, this has been so even with regard to much of the investment made in industry with scarce foreign exchange. The emphasis on industry with a high foreign raw material content has not only led to a drain of foreign exchange but has also meant that industry has had relatively little impact on the development of other sectors. The linkages between industry and agriculture which are technically feasible have not been exploited. For example, textiles are yet made from imported cotton and synthetic material, and the

programme for growing cotton has not yet commenced. Nor has there been any attempt to use other available local fibres for this purpose.

By and large, the very nature of past development programmes were negligent of the needs of the people. The urgent need to provide employment and produce essential consumer items was not given priority.

Public sector investments in industry have been mainly on units which employed very few people. Sectors where there was clear scope for the development of a domestic labour-intensive industry were neglected, and in cases such as textiles there was no attempt to regulate imports in accordance with the development of the handloom textiles whose marketing problems were further worsened by the unplanned rise in the production of mill-made cloth. Thus a fertile field for employment-generation at very low capital costs was allowed to stagnate.

In the agricultural sector, the neglect of the coconut industry in which more than half the acreage is in the hands of small-holders or in village gardens has resulted today in a virtual shortage of coconut for the domestic consumer. It has also prevented the country from taking advantage of the increased price for coconut in the world market in recent years.

Although there are many unemployed in the agricultural sector, the programmes of development have not sufficiently appreciated this fact. The scope for more intensive cultivation of small-holdings, village gardens, and coconut land with other crops has not been fully utilized. This situation reflects not only the lack of adequate agricultural extension measures, but also to some extent the distaste for agricultural work among the younger generation.

The distaste for agricultural occupations reflects to a great deal the rewards and the status attached by society to different occupations. The income differentials existing at present are strongly biassed in favour of non-productive occupations which tend to reinforce the accent given to these activities by the present system of education. Thus the peasant farmer, though in general more productive from a national view-point, does not always enjoy a standard of living comparable to that of the white-collar worker.

The overall development of the economy has also been crippled by an inadequacy of credit. The present structure of credit has not been geared to the development of production. Credit is available only to the wealthy who can furnish security. Economically viable projects which could have increased the wealth of the country have not been started due to their sponsors' inability to satisfy stringent regulations as regards security. Measures to overcome this problem by a system of supervised credit for projects which are proved to be economically viable are only just getting under way.

Thus, the present crisis brings out the weakness of several key sectors of the economy where policies continue which prevailed when the prosperity and well-being of a small class were the chief goals of society.

In the light of this broad analysis, the basic strategy of the Five Year Plan must be composed of the following essential elements :—

(*a*) the maximum use of labour which is the resource available in abundance ;

(*b*) an investment policy which makes the best use of the limited foreign exchange which is available ;

(*c*) the reduction of food imports by the immediate development and diversification of agriculture ;

(*d*) full and efficient utilization of existing industrial plant, expansion of selected industries and investments in new industrial projects on the basis of national priorities ;

(*e*) the development of a new export sector ; and

(*f*) the involvement of the people in the formulation and execution of development projects at the local level.

It is only the total mobilisation of all available resources of land, labour and capital on the one hand, and the effective harnessing of the energy and enthusiasm of the people which can pave the way to recovery, stabilisation and growth.

Given the serious shortage of capital in the form of foreign exchange for the import of machinery and the equally desperate demand for jobs there is very little room for manoeuvre. There is no alternative but to concentrate heavily on a programme dominated by labour-intensive methods of production, selectively supplemented by capital-intensive investments in instances where they are deemed to be vitally necessary for the growth of the economy. Thus, the Plan

envisages a sharp emphasis on the small-scale sector and policies have been framed which take into account the special difficulties of this sector especially with regard to finance and marketing.

The question then arises as to which capital-intensive projects should be given priority in the investment programme of the Five Year Plan. A clear decision has to be taken as regards the type of projects which are to be capital-intensive in nature. Here for the period 1972-76 the Plan proposes that in general no capital-intensive large-scale projects be approved if economical alternative methods of production can be found in the small-scale sector. Thus, in the expansion of the textile industry in the Plan period the main emphasis is on development of the handloom sector where the intitial investment has no foreign component and where, in addition, there is a large potential for employment. Investment on weaving mills where there is a heavy drain of foreign exchange on account of capital investment and where the number employed is very small has to be deferred. Therefore in the present foreign exchange crisis permission will not be granted for the import of industrial plant which can be substituted by indigenous technology and by labour-intensive methods. The available foreign exchange should be used to develop basic industries which can supply raw materials to other industries or which can, as in the case of a fertilizer plant, give an impetus to production in other sectors. Similarly, the machine tools and light engineering sector which can give a push to the economy over a broad front will be developed.

This economy in the use of capital and foreign exchange relates not only to the new projects but also to the use of existing industrial plant and land. In the public sector group of industries where output is scheduled to increase from Rs. 730 million in 1970 to Rs. 1,481 million in 1976 (at 1970 prices), 75 per cent of the output in 1976 must be realised from fuller utilisation of capacities which exist today.

But it is in the agricultural sector that there is the greatest scope for increasing production from existing capacity. The possibility of increasing productivity per unit of land exists both in the plantation as well as in the peasant sector, but there is clearly more scope for this in the latter. Since a large amount of

land is in peasant holdings and since nearly 70 per cent of the unemployed are also in this sector it is here that the development effort has to be focussed. The necessity to make the rural economy more viable becomes all the more important since with the present levels of unemployment in the urban and estate sectors, migration will not alleviate the rural problem. Thus measures to strengthen this sector form the core of the Plan. These policies have two main objectives, one to make peasant agriculture more viable and the other to create a new rural-based industrial sector.

With regard to measures to improve peasant and small-holding agriculture, the basic aim is to remove the present dependence of this sector on traditional export crops and on paddy. The plan for agriculture concentrates on creating new income-generating activities in agriculture. The emphasis on subsidiary food crops, horticulture, cotton, mulberry, animal husbandry and fisheries attempts not only to raise the income generated to a level commensurate with the size of the rural population but also to create a commercial and modern rural sector which provides attractive employment prospects to the rural youth who have today to a great extent virtually withdrawn their labour power from the traditional activities which have dominated this sector.

This alienation of the youth derives from two other characteristics which determine their attitudes towards agriculture-based occupations. One represents the effects of the educational system which has tended to distort their orientation. The other is the balance of property relations in the rural sector. It is difficult to attract the youth to agricultural occupations if most of the surplus is appropriated by landowners and middlemen. Thus land reforms are vital to the development envisaged in the Plan and will be speedily implemented. Together with this, new forms of organisation have to be created within agriculture which give the farmer a vested interest in improving his holding and at the same time obtain for him some of the economies of scale in agricultural operations, processing and marketing.

Together with these measures the Plan stresses on the creation of an agro-based industrial sector dispersed in rural areas which will not only be another employment outlet for rural youth but will also give an impetus to agriculture by providing a market for agricultural by-products.

The diversification of rural economic activity which will result from such policies can stimulate the interest of the younger generation to participate more actively in the life of the community.

At the same time, long-term changes are planned in education where new vocationally oriented curricula are expected to stimulate an interest among pupils in the opportunities available at all levels for engaging in productive activities.

This emphasis on educational change belongs to the overall strategy for the entire economy. Its aim is to shift labour from its present aimless search for non-existent white-collar occupations to economic activities which increase the income of the country. But such a shift even on a long-term basis cannot be done only by educational reforms. Nor can it be done merely by providing incentives to start small industries and to grow new types of agricultural crops, to take to animal husbandry or to fisheries. A shift to new activities has to be justified in terms of the income generated in these activities. There would be very little point in growing passion fruit if this cannot be sold at a reasonable price, or if the profits were to be tapped by middlemen. Similarly few would be attracted to work in agriculture or industry if we continue to maintain the present income differentials between the managerial and administrative occupations and the manual workers who are in the main the producers of the country's wealth. Thus there will be reforms in the wage structure of the country to narrow the differential between occupations and a positive advantage will be given to occupations which contribute to the creation of national wealth.

The inescapable corollary of this argument is the need to hold salaries at reasonable levels. The present spiralling of salaries has led to a situation in which employment opportunities for the educated unemployed cannot be expanded at the pace commensurate with the increase in their numbers. In the state sector, a significant expansion of employment at current salary levels would imperil the entire budgetary structure. On the other hand the educated unemployed can contribute immensely to the development of the country's resources. They can provide the skills and leadership

necessary to set up small industrial units, farms and co-operatives. As development administrators at the local level they have a contribution to make to the regeneration of rural Ceylon and for the successful implementation of the Five Year Plan. Although their services are clearly necessary for the country's development they are not being employed because of the unrealistic level of prevailing salaries. For example, engineers are unemployed though there is enough work for them to do. The schools need more teachers, but many graduates still remain unemployed.

The prevailing salary structure is a relic of an era when a small class could be maintained at a level of living which was completely at variance with that of the mass of the people. The continuation of this salary structure has kept employment at artificially low levels. The need has arisen for a new level of salaries which can employ more people in useful productive activities thereby spreading the effects of Government expenditure more equitably throughout the community.

In addition to its dampening effect on employment, the continued rise in salary levels has also led to the even more pernicious effect of pauperising the non-organised sectors of the community which have no safeguard against monetary inflation.

If employment is to be increased, if inflationary pressures and the consequent erosion of real wages is to be kept in check, it is essential to change the salary structure of the country in keeping with the egalitarian yearnings which propelled the Government into power.

Together with these changes price policies will be adopted in agriculture in order to ensure that the producer gets a fair income. For some crops where there is an export demand, or where the product has to be processed before sale to the consumer, price supports and guaranteed price schemes will be formulated. In other cases where there is a ready domestic demand as in the case of some subsidiary food items, imports will be banned in order to give an incentive to domestic production. Furthermore one of the main obstacles to the development of the rural economy has been the absence of organised marketing facilities. While the co-operative societies will be encouraged to take on this function, other institutional machinery such as Marketing Boards will also be set up for several products.

It is necessary to view the question of the cost of living against the entire strategy of the Plan. In a static approach, the easiest way to limit the increase in the cost of living is to increase foreign exchange allocations to import the required goods. If there is foreign exchange available this policy can continue. But it will cripple the development of domestic production, lead to high unemployment, and a low level of economic activity. Foreign exchange resources are no longer available to support such a policy. On the other hand, if imports of some items are stopped, local production will be stimulated. While an increase in price is necessary if there is to be import-substitution in many of these commodities, it has to be realised that such increases in price will raise incomes in the hitherto depressed peasant sector. This is in contrast to the situation in industry where a different structure prevails. Monopoly industrialists, by virtue of their right to imported raw material allocations, make profits on a scale totally unrelated to the benefit they have given to society. A similar situation prevails in the import trade where the possession of an import licence enables the exploitation of a captive market. Policies that are part of the Plan strategy will however ensure that any inordinate profits of large producers who benefit from a rising level of prices will be diverted to investment and the creation of employment through fiscal and other measures. The producer and the consumer will be protected from the unscrupulous exploitation of the middle-man through an improved co-operative system and the organisation of efficient marketing facilities. But given all these conditions, a mildly rising level of prices is an inevitable corollary of growth. Rising incomes and a larger parcel of goods and services to the average household at moderately rising prices will be a direct outcome of the Plan strategy.

As mentioned earlier the Plan gives a strong emphasis to policies and programmes for the expansion of production and employment in the rural sector. The nature of organisation of this sector in small units means that new institutions are needed to activate it. Thus, although policy instruments such as price supports and subsidies will be used, it is also essential to take steps independent of normal economic measures to organise the human and natural resources in this sector. A necessary condition for the success of such an organisation is the need for co-operation between the Government apparatus and the dynamic forces in the village which are seeking

for means to regenerate rural Ceylon. The Divisional Development Councils have been formed to serve this purpose. Full use will be made of the potential inherent in these organisations and their functioning will be kept continually under review. Technical as well as financial assistance will be channelled through them to stimulate small-scale industrial and agricultural production and rural infrastructure such as housing. Further, the People's Bank will organise a scheme of supervised credit to enable projects to be started which are economically viable and would enrich the country. Such projects which get started will not be allowed to flounder owing to the absence of financial backing. By and large, the producers' co-operatives will be used as the institutional form for these new agricultural and industrial projects.

The institutional and administrative machinery for the implementation of the Plan is set out in some detail in Chapter 8. Such machinery is but an instrument for mobilising the energy of the entire nation for a united effort to overcome the present problems and move forward towards a better future.

With the increasing role of the Government in the process of economic development, the administrators and public servants of all grades have an important role to play in providing the guidance, and the services necessary for the path to economic growth. The administrator can no longer be an individual remote from the people carrying out routine duties in government offices. He is in an important sense the link between the Government and the people. It has become his task to translate into action the specific programmes, policies and targets of national development. The development administrator has to play a crucial role in enabling the people to carry out the tasks envisaged in Government's programme of action. With this end in view Government is taking steps to decentralise the administration and bring it within easy reach of the people.

Equally important is the involvement of the people in the tasks of national development and national reconstruction. While a Plan would provide the resources and the policies necessary for this task, its success depends in fact on the will, energy and the determination with which every citizen accepts the challenge of economic development, and generates that momentum for growth in the economy which is so essential at the present time.

It is at this stage necessary to make a fundamental point concerning the responsibility of the producer. The crisis today cannot be solved if every attempt is not made to utilise Ceylon's existing resources. This particularly applies to existing industrial plant and agricultural land. Thus, while tax rebates, guaranteed prices, subsidies for replanting, for fertilizer use and for agricultural development will be given to the producer, it must also be recognised that the means of production have to be subject to social control. The misuse or neglect of productive resources whether it be an estate, a colonist's holding, a factory or a workshop can neither be afforded nor tolerated. If such resources are not maintained and run on efficient and productive lines, then society must have the right to intervene for the general good in order to see that there is no run down of the national wealth. Thus specific legislative sanctions will be framed to ensure that national resources in the form of land and industrial plant are not neglected.

Finally, a word must be said about the implications of population growth both for short-term or long-term economic development. The continued growth of population at the present high rates will pose problems which would defy every attempt at solution. In the short-term, any further increase of the number of births from the present level of around 370,000 per year will place inordinate strains on the school system, on hospitals, and the supply of other goods and services, and in such a situation, it is only by a shift of investment from productive activities that it would be possible to maintain these services even at present levels. In the long run, the expansion of population at present rates would result in a population of about 27 million in the year 2000. Even with a rapid decline in fertility rates the population would grow to 20 million by the year 2000. The strain on resources imposed by the present rate of population growth would be almost intolerable. The Plan thus gives very high priority to the diffusion of family planning facilities amongst the mass of the adult population.

In conclusion, it should be stated that Five Year Plan is primarily geared to correct the serious gap which has today arisen between the needs of the people and exploited resources. In social terms, the Plan seeks to upgrade hitherto neglected strata of Ceylon society—the unemployed, the urban and rural poor, the landless labourer, the wage-earner and the small peasant.

CHAPTER 2

PLAN FRAMEWORK

THE basic objectives of the Five Year Plan were outlined in Chapter 1. The factors that govern the rate of growth of the economy were also examined. In financial terms, the resources that can be devoted to developing the economy are governed by the willingness and the ability of the Government and the people as a whole to save a part of their income for investment. A second limiting factor is the availability of foreign exchange resources. Taking these into account and also the possibilities for investment in the different sectors of the economy it has been estimated that during the five-year period 1972–76, the economy could grow at an average rate of about 6 per cent per year.

At 1970 factor cost prices, the Gross Domestic Product will increase from Rs. 11,760 million in 1970 to Rs. 16,822 million in 1976. A substantial part of the increase in domestic product is to be obtained from the fuller and more efficient use of existing capacities in the different sectors. Yet a high level of investment will have to be sustained during the Plan period to achieve this growth rate. The total investment required during the period is approximately Rs. 15,000 million—rising from a level of about Rs. 2,565 in 1972 to Rs. 3,394 million in 1976 (at current prices).

Savings and Investment

The following table shows the magnitude of the savings effort needed during the Plan period if overall investment targets are to be met.

Table I

SAVINGS AND INVESTMENT

(Rs. million at current prices)[1]

	1972	*1973*	*1974*	*1975*	*1976*
1. Gross Domestic Product at market prices	14,187	14,969	15,841	16,746	17,685
2. Gross Investment	2,565	2,742	2,955	3,161	3,394
3. Gross savings at an average rate of 12·5 per cent	1,773	1,871	1,980	2,093	2,211
4. Shortfall of investment if savings remained at 12·5 per cent	792	871	975	1,068	1,183

[1]These prices take into account only the projected changes in the prices of imports and exports. All projections in this table are necessarily based on an estimate of Gross Domestic Product for 1971. They will have to be suitably revised when the figure for the actual growth of Gross Domestic Product in 1971 is available.

The savings required for the Plan need to be compared with the savings effort in the past when only 12·5 per cent of G. D. P. was saved. The third row of the table shows the amount of resources that will be available for investment at a savings rate of 12·5 per cent and the fourth row shows the shortfall of investment that would occur if savings remained at 12·5 per cent. Today such a shortfall exists and is financed by borrowings from abroad. However, there are limits to the amount of external borrowings. In the first place, the availability of such funds depends on the willingness of foreign banks and governments to lend to this country. But even if such funds were available it would be disastrous to follow such a course as the rising burden of capital repayments and interest charges will become an intolerable burden both for the present generation and for generations yet to be born. It is essential to generate as much resources as possible from within the economy through an increased savings effort. The average rate of saving must be raised considerably from its present low level. The net capital inflow from abroad during the coming five years has been estimated at Rs. 1,500 million. Even given these external resources the balance out of the investment target of Rs. 15,000 million will have to be generated domestically. This would mean that the savings rate should rise from the present figure of 12·5 per cent to about 17 per cent of G. D. P. This has to be achieved by saving a larger proportion of the increases in income during the Plan period. It has been estimated that at least about 26 per cent of such increases in incomes should be saved if the investment targets are to be met.

The investment made possible by such a savings effort would lead to a rise in Gross Domestic Product from Rs. 11,760 million in 1970 to Rs. 16,822 million in 1976. Assuming that the population grows at about 2·1 per cent per annum, per capita income will increase from Rs. 910 per annum to Rs. 1,150 in 1976 (at 1970 prices).

Of this increase in income 74 per cent would still be left for consumption, according to the rate of savings assumed in the Plan. It would be therefore seen that on the average consumption per head will show a sustained rise during the Plan period.

Financing the Plan

The Government, the private sector and the public sector will have to make their contribution to the national savings effort required to meet the Plan targets. Table 2 shows how the investment

programme of the Plan will be financed. It is based on an average savings rate of 17 per cent as against the present 12·5 per cent of national income. The marginal rate of saving—that is the proportion that has to be saved out of the additional income accruing during the Plan period—works out to about 26 per cent.

Table 2

FINANCING OF THE INVESTMENT PROGRAMME

(Rs. million at current prices)

	1972	*1973*	*1974*	*1975*	*1976*
1. Gross Investment	2,565	2,742	2,955	3,161	3,394
Sources of Finance					
2. Government savings[1] (surplus on current account)	112	123	197	288	383
3. Surplus of Public Corporations	120	145	176	214	272
4. Private savings	2,024	2,133	2,255	2,382	2,513
5. Net capital inflow	309	341	327	277	226

[1]These estimates are based on the classification in the National Accounts.

The Government's revenue and expenditure policies become crucial to the financing of the Plan. The emphasis in the Government's pattern of expenditure must necessarily shift from non-productive expenditures to outlays on productive investments that increase both employment and the material wealth of the country.

The necessary condition for such a shift is a surplus of Government's revenue over its current expenditure. It is seen from Table 2 that the surplus on the Government's current account will rise from Rs. 123 million in 1973 to Rs. 383 million in 1976. Such a surplus requires a major change in Government budgetary policy. A surplus on the current account of the dimensions needed will depend on the Government's ability to contain the increase in current expenditure within limits, eliminate waste, and effect strict economies in all branches of expenditure which are not directly productive. The surplus will also depend on fiscal and tax measures which will divert to Government revenue a portion of the increase in incomes during the five-year

period. The savings effort presupposes the growth of income, and in turn, increases of income depend on saving and investment. They are interdependent parts of a single strategy and will necessarily go together. What is demonstrated in Table 2 is the possibility of achieving the required level of investment through Government and private savings while allowing for a reasonable rise in consumption. However, it must not be assumed that there can be an easy effortless increase in the level of savings. There will be an inevitable lag of one or two years between the initial raising of the savings rate and investment and the returns that will follow in the form of higher incomes. In the initial stages the country has to accept short-term restraints on consumption, additional taxation and the resultant hardship if it is to attain a higher level of consumption within the five-year period.

The present average rate of return from the investment in the public sector corporations is 6 per cent. The anticipated surplus assumes that this return will rise to at least 15 per cent by 1976. This target by itself is a modest one and should by no means be interpreted as the optimum return that is eventually expected from the public sector. The higher return achieved during the Plan period results from a combination of factors. There will be a substantial expansion of output in the public sector. As set out in Chapter 4 the unutilized capacity in the industrial corporations will be put to full use in the next five years and the level of production will rise from Rs. 730 million to Rs. 1,481 million.' The expansion of state trading will also generate a surplus in the public sector. The changes contemplated in the organisation and management of the public sector enterprises combined with realistic pricing policies will contribute to the achievement of the savings target laid down in the Plan.

Private savings are expected to rise from Rs. 2,024 million in 1972 to Rs. 2,513 million in 1976. These assumptions are consistent with the average savings rate of 17 per cent for the total economy. After allowance is made for direct taxes and for a steady increase in consumption, the private sector comprising households, business enterprises and co-operatives would be able to save approximately Rs. 11,307 million over the next five years. These savings will be available both for borrowing by Government to finance part of the

public sector investment, as well as for carrying out the investment programme of the private sector. Therefore the fundamental condition for the success of the Plan will be the achievement of the target for private savings. A substantial portion of these savings will be generated within the enterprises in the private sector. The incentives for corporate savings will be provided under several programmes. The programmes for the expansion of the non-traditional exports and the tourist industry both rely heavily on private sector investment and these programmes provide a wide range of incentives. Similarly, the programmes for agricultural diversification contain incentives which will stimulate saving and investment in the private sector. However, it has to be emphasised that the strategy of the Plan is such that a large part of the increase in output will occur in the sectors of the economy which will raise incomes of the poorest strata in our society. Therefore in order to achieve the target set out in the Plan there has to be a mobilisation of savings on a national scale which will include the rural population and the urban working class. To realise this objective the Government will take measures on several fronts. For the wage earning sector already there has been an increase in the level of provident fund contributions. For new entrants, the Government pension scheme will be replaced by a contributory provident fund. In the rural sector, social security and insurance schemes will be devised to divert part of the increase in income to savings. Capital formation in the rural sector will be given high priority through the Divisional Development Council programmes. The Plan also envisages a higher level of housing construction which will be an important means of stimulating and mobilising savings of the small savers.

Another source of finance for the Plan will be the net capital inflow from abroad. This will include official government borrowings from foreign lending institutions and governments, private foreign investments and credit from suppliers of plant, equipment and other goods. Part of the inflow of capital therefore comprises foreign commodity aid and project aid. The capital inflow is based on a strategy which contains borrowings at a level commensurate with the capacity for repayment while at the same time it lends the necessary support to the investment effort. The Plan assumes a decline of net foreign borrowing after 1973 and attempts to reverse the trend of the past few years and pave the way towards self-reliant

economic growth. The domestic savings effort and foreign aid are inversely related ; to the extent that domestic savings increases, the foreign aid component can be reduced.

Distribution of Investment

Table 3 shows the projected distribution of investment as between the public and private sectors during the Plan period.

Table 3

INVESTMENT IN PUBLIC AND PRIVATE SECTORS

(Rs. million at current prices)

	1972	*1973*	*1974*	*1975*	*1976*
1. Public investment	1,101	1,220	1,372	1,558	1,787
2. Private investment	1,464	1,522	1,583	1,603	1,607
TOTAL	2,565	2,742	2,955	3,161	3,394

Over the Plan period the private sector would be responsible for nearly 50 per cent of the total investment. Private sector investment here includes private housing construction, investment by co-operatives, and investment by all producers and businesses outside the government sector.

The distribution of the planned investment by sectors is as follows:—

Table 4

SECTORAL COMPOSITION OF INVESTMENT

(Rs. million at current prices)

	Total	*Public*	*Private*
1. Agriculture	3,000	1,700	1,300
2. Industry (mining, quarrying and manufacturing)	2,240	1,240	1,000
3. Transport, Communication and Power	2,480	2,290	190
4. Services	850	550	300
5. Construction—			
Housing*	4,200	200	4,000
Other	100	60	40
6. Capital replacements	1,000	500	500
7. Total gross fixed investment	13,870	6,540	7,330
8. Additions to stocks and work in progress	950	500	450
9. Total gross investment	14,820	7,040	7,780

*i.e. new housing, extensions, improvements and repairs, and related infrastructure.

The total increase in the gross domestic product during the Plan period is estimated to be in the region of Rs. 3,526 million. As the proposed capital investment for the period 1972–1975 is Rs. 11,460 million[1], the capital-output ratio works out to about 3·25 : 1. In other words, on the average every Rs. 325 of investment leads to an increase in the national income by Rs. 100 per year. The somewhat low capital-output ratio is the outcome of the broad strategy of the Plan discussed in the previous chapter. The emphasis on the full utilization of existing capacities, on labour-intensive techniques and on the small-scale sector in industry and agriculture all contribute to economy in the use of capital. It is a necessary corollary of the emphasis given to employment-creation in the overall strategy of the Five Year Plan.

Sectoral Growth

The sectoral composition of the gross domestic product in 1970 and 1976 is shown in Table 5.

Table 5

SECTORAL CONTRIBUTION TO GROSS DOMESTIC PRODUCT 1970 AND 1976

(Rs. million at 1970 prices)

Sector	*1970*		*1976*		*Annual rate of growth per cent*
	Value in Rs. million	*Share of each sector*	*Value in Rs. million*	*Share of each sector*	
(1) Agriculture	4,264	36·3	5,671	33·7	4·9
Tea (includes processing)	810	—	953	—	2·8
Rubber (includes processing)	328	—	374	—	2·2
Coconut	593	—	727	—	3·5
Paddy	951	—	1,433	—	7·1
Other	1,582	—	2,184	—	5·5
(2) Industry	1,523	13·0	2,692	16·0	10·0
(3) Construction	771	6·5	1,094	6·5	6·0
(4) Services	5,202	44·2	7,365	43·8	5·9
(5) GDP at 1970 factor cost prices	11,760	100·0	16,822	100·0	6·1

[1] These estimates are in constant prices. The investment in 1976 is not included, as output from this investment will be derived after the Plan period.

The table shows that changes in the relative importance of the different sectors during the Plan period in terms of their share in the national output will not be significant. The sectoral composition in 1976 however reflects the strategy of the Plan, and the emphasis given to agricultural development. The figures relating to sectoral output by themselves do not reflect the significant changes that would have taken place in the economy during the five-year period. Within agriculture the modernisation of peasant farming and the diversification of agriculture will impart a new growth impulse to a sector in which productivity and income has been consistently low. The growth of agro-based industries and the expansion of the small-scale sector in industry would also diffuse technology over a wide area and provide a base for sustained growth of the rural sector.

Another element in the strengthening of the economy during the Plan period is the major change in the import and export structure. During the last two decades Ceylon continued to depend on three major exports which contributed nearly 90 per cent of her export earnings. The diversification of exports which is envisaged in the Plan will reduce Ceylon's dependence on these three crops. Although the earnings from tea, rubber and coconut will increase marginally during the five years, their contribution to total export earnings would have declined to 65 per cent. The Plan expects to increase the contribution of the present minor exports, and to create a new export sector. One aspect of the new export sector will be a planned shift of industry from import-substitution alone to a significant new role as an export earner. Equally important changes will take place in the structure of our imports. Food imports which consitituted a major portion of imports in the past will be drastically reduced during the Plan period with the local production of rice, subsidiary food crops, sugar, milk and other food items. Imports will accordingly shift to the intermediate and capital goods sector. Therefore the changes that would take place in the composition of imports and exports would have strengthened the economy both by expanding its productive capacity in key sectors and improving the balance of payments.

Balance of Payments

The achievement of the development goals will depend crucially on the capacity to manage the balance of payments successfully and mobilise the required external resources. The balance of payments forecast for the five-year period is summarised below.

Table 6

BALANCE OF PAYMENTS FORECAST

(Rs. million at current prices)

Current Account	*1970*			*1976*		
	Credit	*Debit*	*Net*	*Credit*	*Debit*	*Net*
1. Merchandise	2,011	2,336	– 325	2,710	2,893	– 183
2. Profits, dividends and interest	11	153	– 142	14	240	– 226
3. Other	242	243	– 1	410	266	+ 144
4. Total current account	2,264	2,732	– 468	3,134	3,399	– 265

The strategy for improving the balance of payments during the five years consist of three main elements. The major import-substitution programmes in agriculture and industry will lead to the reduction in the demand for consumer and raw material imports. The success of the import-substitution programmes is however contingent on the timely introduction of import restrictions. These will initially result in scarcities and provide the incentives necessary to divert resources to production. The programmes described in detail in the export plan in Chapter 6 are planned to raise the value of exports by about 35 per cent. External assistance will be mobilised to provide the additional resources that will be needed. As stated earlier, the net capital inflow from abroad has been maintained at a level to meet the Plan objective of reducing our dependence on foreign aid. The balance of payments strategy would therefore depend on containing import demand, expanding exports and mobilising external assistance.

Employment

The total employment created by the stream of investment proposed in the Plan is in the region of 810,000. The sectoral distribution is as follows:—

Table 7

EMPLOYMENT CREATED DURING THE PLAN PERIOD

1. Agriculture		300,000
2. Industry		165,000
3. Construction		60,000
Services		285,000
	Total	810,000

With a backlog of unemployment of 550,000 and an addition to the labour force of also about 550,000 during the Plan period, there will still be a residue of 290,000 not included in the above programme. In order therefore to deal with this problem, special works programmes will be organised in the urban, rural and estate sectors and funds will be allocated for these from the government budget. Such programmes will be necessary also for mobilising all available manpower resources for economically productive activities in order to accelerate the process of economic growth.

For the purpose of implementing such a special works programme, the combined organisational resources of the National Youth Service Council and the island-wide network of Divisional Development Councils will be utilized.

Participation in the programme will be wholly voluntary. Many of these projects will form part of the Divisional Development

Council programme and will strengthen both the infrastructure and the productive base of the rural areas. These could include the following activities :—

Minor Irrigation works
Restoration and Desilting of Village Tanks
Land Development
Land Reclamation
Reafforestation
Soil Conservation
Construction of Roads
Construction of Community Wells
Construction of Community Buildings
Rural Housing
Animal Husbandry.

CHAPTER 3

AGRICULTURE, FORESTRY AND FISHERIES

I—AGRICULTURE

Problems and Policies

IN 1970, the agricultural sector contributed 35 per cent of Gross Domestic Product. It is the largest productive sector in the economy and therefore the overall growth of the economy is closely related to the increases in agricultural production. But it is not for this reason alone that agriculture claims high priority in the Plan. It presents the greatest scope for the expansion of output and employment in relation to investment outlay. In agriculture there are substantial growth possibilities which are not constrained by a shortage of foreign exchange. This is due to the scope for more intensive use of land and labour, for increasing output with high yielding strains in a variety of crops and for better use of available water resources. The possibilities of import-substitution are also greatest in agriculture, while the achievement of the export targets in the Plan relies heavily on the increase in productivity in the traditional export sector—tea, rubber and coconut—and the development of other export-oriented crops.

The agricultural policies of the past two decades were directed primarily at the development of three major crops—tea and rubber in the export sector, and paddy in domestic peasant agriculture. In the export sector the emphasis was on the improvement of the large-scale plantation ; the small-holder, particularly in coconut and rubber, was relatively neglected. The government programmes which benefited the peasant farmers concentrated almost exclusively on paddy. This was true of the massive outlay on colonisation schemes as well as the institutional support and extension services that were provided in the rural sector. Many areas with a high potential for growth, such as coconut, animal husbandry, horticulture, received little attention. As paddy still remains the crop with the largest potential for import-substitution it has unquestionably

very high priority in the Agricultural Plan. But the modernisation of peasant farming cannot be accomplished on the basis of mono-crop agriculture. The gap between population and resources has to be met by an expansion and diversification of small-scale agriculture on a much wider and more systematic basis than hitherto attempted.

During the Plan period priority will be given to creating a viable small-scale sector in agriculture. Since a large proportion of the unemployed lives in rural areas this task is urgent. The ills of the small sector can be remedied only by an attack on a broad front ranging over the institutional, organisational, financial and technical services available to the cultivator.

As stated earlier, the rural sector cannot continue to rely entirely on paddy and on the traditional export crops. The imbalance between population and the income from such crops can only be bridged by the creation of other income-generating activities. One way of supplementing rural incomes is to encourage crops which have a ready domestic and export market. The expansion of the horticultural programme, especially in passion fruit and pineapples, and the cultivation of new crops which can provide raw material for industry, such as cotton, mulberry, sunflower, kenaf, cashew, sugar cane and castor, will be an important element in the Plan. Together with this, an import-substitution programme in subsidiary food crops such as onions and chillies will give further scope for the expansion of rural incomes.

A high potential for growth also exists in the hitherto neglected activity of animal husbandry. Poultry farming, piggeries and dairy farming will be considerably extended. Together with these programmes, the modernisation of the fishing industry will be carried out by accelerating its mechanization.

Policies essentially suited to the development of the highly organised plantation sector of the economy with its ample financial resources and high managerial skills cannot be expected to have an impact on small-scale agriculture. The structural weakness of the small-scale

sector where a population explosion had outstripped production increases placed stringent limits on the surplus available for investment. A shift of population from the village areas was also not possible due to the very slow expansion of employment opportunities in industry in the towns. Further, the organisation of peasant agriculture in small-holdings placed a limit on innovation in the form of new crops or on marketing arrangements, which could have given a fair price to the producer.

Special policies and a concerted effort by all government agencies working in this field are necessary to develop and realise the full potential of peasant agriculture. Subsidised fertilizers for crops other than paddy and the traditional exports, credits and subsidies to finance the initial expenses for growing new crops, the support programme in the form of extension measures and advisory services, marketing arrangements and appropriate financial and pricing policies need to be introduced if significant increases in rural incomes are to be expected.

The Agricultural Plan also seeks to strengthen the traditional export sector. Programmes have been devised for more intensive application of fertilizer, for accelerating the rate of replanting, and for introducing high-yielding strains.

The other major aspect of the development programme which will have a substantial impact on the agricultural sector is the heavy investment which will be made on irrigation. The Mahaveli, Walawe, Lunugamvehera and other irrigation schemes will provide in the Plan period nearly 200,000 acres of new irrigated land and irrigate another 200,000 acres of already cultivated land.

Large investments will also be made in the fisheries sector. An investment of over Rs. 100 million is to be made on approximately 200 vessels for expanding the deep sea and off-shore fisheries programme

The programmes in agriculture, animal husbandry and fisheries alone cannot contain the demand for employment in the rural sector. The development of industry in rural areas is an essential part of

the programme of development. In order to obtain the maximum benefit such industrial development has to be based on agricultural raw materials. Special agricultural programmes have been framed for agro-based industries.

There are two aspects to the successful implementation of the agricultural programme. One is the creation of conditions which encourage and make it practicable for the cultivator to adopt such a programme. A new fertilizer subsidy scheme, the expansion of existing extension programmes, the creation of extension programmes for crops such as cocoa, mulberry, cashew and horticultural products, the establishment of more nurseries for distributing better types of planting material on an expanded basis are the more important steps that are proposed to be taken in the first year of the Plan.

The other aspect of the problem is the neccesity of a system of sanctions to discourage neglect of land. It need hardly be mentioned that, in the present context of land shortage and inadequate production levels, the neglect of cultivated or cultivable land would have serious implications for the economy. In the case of the estate sector, replanting and the use of an adequate amount of fertilizer will be compulsory and neglected estates will be acquired by government. In the case of small-holdings emphasis will be placed on extension work, since the small sector by virtue of its present backwardness is ill-equipped to organise itself to respond adequately to the incentives that are offered.

For the successful implementation of many of these measures it is essential that the peasant should have a vested interest in agricultural improvement. Thus to take an example, in the large-scale coconut sector which relies heavily on indigeneous labour, improvement and intensive cultivation with subsidiary crops and the development of animal husbandry have been handicapped by a shortage of labour. If most of the surplus generated in agriculture is taken by landowners and middle-men, there is little incentive to work hard and to increase production. This co-existence of labour shortage and unemployment reflects a social crisis which can only

be solved today by land reforms. The land released by such reforms will have to be organised on a new basis which will give more scope for the introduction of new methods, new crops and for better marketing arrangements.

The objectives of the Agricultural Plan in terms of crops can be broadly enumerated as follows :—

(*a*) Increasing output in the traditional export sector in tea and rubber ;

(*b*) Replanting uneconomic tea and rubber lands with other crops ;

(*c*) Rehabilitation of the coconut industry with special programmes for fertilizer application, for increasing productivity in small holdings, for replanting and for more intensive use of coconut land with inter-cropping ;

(*d*) Increasing paddy production to achieve self sufficiency in 1977;

(*e*) Increasing production of subsidiary food crops such as chillies and onions ;

(*f*) Agricultural diversification with horticultural crops. This will not only supplement rural incomes but also contribute to export earnings ;

(*g*) Special programmes for the following crops : cotton, manioc, soya bean, kenaf, timber, sunhemp which are all inputs for agro-based industries ;

(*h*) The rehabilitation and expansion of the sugar industry ;

(*i*) Supplementary programmes for increasing the supply of vegetable oils for export as well as for domestic consumption by the cultivation of soya bean, groundnut, sun-flower and cotton for cotton seed oil.

An expansion in output is planned in animal husbandry and in fisheries through a considerable programme of capital investment. Details are set out in the programmes for these two sectors.

During the Plan period agriculture is expected to grow at a rate of about 5 percent per year. It will form a slightly lower proportion of gross domestic product than in 1970.

The output targets in the major agricultural programmes are as follows :—

Table 1

OUTPUT TARGETS

			1970	*1976*
1.	Tea	(million lbs.)	468	550
2.	Rubber	(million lbs.)	351	400
3.	Coconut	(million nuts)	2,632	3,000
4.	Paddy	(million bushels)	77	116
5.	Sugar	(tons)	8,000	50,000
6.	Chillies	(cwts.)	125,000	600,000
7.	Onions	(cwts.)	716,000	2,400,000
8.	Pulses	(cwts.)	50,700	265,000
9.	Maize	(cwts.)	409,000	660,000
10.	Pineapple	(tons)	68,750	155,300
11.	Passion Fruit	(million lbs.)	10	75
12.	Cashew	(cwts.)	18,000	67,000
13.	Cocoa	(cwts.)	50,000	59,000
14.	Milk	(thousand pints a day)	850	1,400
15.	Meat	(million lbs.)	93	119
16.	Eggs	(millions)	278	342
17.	Fish	(tons)	107,000	170,000
18.	Timber	(million cu. ft.)	6	12
19.	Cotton	(tons)	380	18,000
20.	Natural Silk	(lbs.)	—	106,000

Investment in Agriculture

The major investments in agriculture consist of the following :—

(*a*) Investment on Mahaveli—Stage I, Uda Walawe and Lunugamvehera Schemes ;

(*b*) Investment on other reservoir schemes and medium and minor irrigation works.

Under these schemes it is planned to improve irrigation facilities to existing cultivated lands as well as to open out new irrigated lands according to the following schedule

Table 2

EXTENT OF LAND IRRIGATED (ACRES)—1972-76

	1972	*1973*	*1974*	*1975*	*1976*	*Total 1972-1976*
Presently cultivated land	10,836	15,224	133,850	17,284	19,750	196,944
Newly developed land	25,493	31,457	42,092	52,097	52,536	203,675

In addition, investment will be made on the replanting programmes in the traditional export sector, in the crop diversification project, and in capital equipment for agricultural operations and the expansion of storage facilities. A summary of the estimated investment* is given below.

Table 3

INVESTMENT IN THE AGRICULTURAL SECTOR—1972–76

	Rs. Million
1. Tea Replanting at 7,500 acres per annum	225
2. Modernization of Tea Factories	60
3. Rubber Replanting at 15,000 acres per year	150
4. Rubber Processing Factories	25
5. Coconut Replanting Scheme	80
6. Paddy and other field crops†	
(*a*) Mahaveli—Stage I (excluding power)	540
Mahaveli—Stage II (commencement of work in 1975/76)	100
(*b*) Uda Walawe (including sugar)	314
(*c*) Kirindi Oya Basin Development — Lunugamvehera	70
(*d*) Other Irrigation works	230
(*e*) Settlements in Schemes other than Uda Walawe and Mahaveli	100
(*f*) Storage equipment, and capital costs of extension—	
(i) Extension	100
(ii) Tractors and other equipment	105
(iii) Storage	30
(iv) Milling	20
7. Animal husbandry—pasture development, importation of stock, milk collection and processing	90
8. Cashew	30
9. Cocoa	20
10. Floriculture	4
11. Fisheries	237
12. Forestry	100
13. Natural Silk	40
14. Investments in other Agricultural Programmes	330
Total	3,000

*These are preliminary estimates and may require revision in the course of the Plan period.

†This includes cotton, sugar cane and subsidiary food crops.

Investment during the Plan period on the major programmes will amount to approximately Rs. 2,600 million. The recurrent foreign exchange cost of the programme will consist almost entirely of fertilizers, other agro-chemicals, and the maintenance cost and depreciation of agricultural equipment. A major part of the increase in output will be the result of more intensive use of land. Some part of the increase in production will flow from investments already made in irrigation works such as Uda Walawe. Some of the investments that will be made during this period will bring benefits only after 1976, for example, replanting of tea, rubber, coconut, and planting of cocoa, cashew and mango. This would also apply to part of the investment on the left-bank of Uda Walawe and part of the investment in the Mahaveli Project.

Employment

The extent of land brought under production during the Plan period would be substantial. The following table gives the estimate of new land to be brought into cultivation under the new projects.

Table 4

EXTENT OF LAND DEVELOPED UNDER NEW PROJECTS

	Project	*Extent of New Land (acres)*
1.	Mahaveli Project	80,000
2.	Uda Walawe Project	50,000
3.	Irrigation Reservoirs—major, medium and minor (primarily paddy)	77,000
4.	Cashew	26,000
5.	Mulberry	12,000
6.	Cocoa	10,600
7.	Kenaf	13,500.

These programmes amount to approximately 269,000 acres.

The new acreage which will be brought under cultivation in these schemes will result in new settlements and would therefore create additional employment opportunities with the settlement of households on new agricultural land. In addition to these settlement programmes, the Agricultural Plan provides for the intensification of

existing programmes and the cultivation of new crops by better use of already developed land. The expansion of the programme for the cultivation of labour-intensive crops such as chillies and onions in the Dry Zone, as well as better use of land by inter-cropping and cultivation of highland in colonisation schemes will absorb part of the increment in the workforce in these areas.

In the principal agricultural crops tea, rubber, coconut and paddy much of planned increase in output comes from higher productivity, and thus the increase in employment will not be very significant.

The increase in the rate of replanting of tea, rubber, coconut and land development will bring additional employment opportunities. Additional employment will also be created by the expansion in animal husbandry, fisheries and forestry.

The agricultural programme requires an expansion of the cadre of extension personnel for the small-holding sector in rubber, coconut, cocoa, sugar, cotton and animal husbandry. Similarly, extension personnel would be required for new crops such as mulberry and passion fruit. Extension personnel for the fisheries programme will also be increased.

Apart from the above programmes, employment opportunities will be available in small-holdings and in village gardens based on the cultivation of minor export crops as well as other crops such as yams, vegetables, fruits and tobacco.

It would be possible to make an estimate of the additional units of employment by taking each crop and estimating the additional labour that would be required for the output increase during the Plan period. On this basis the number of jobs likely to be created in agriculture, forestry and fisheries is about 300,000.

Crop Programmes

The main details of the crop programmes are given below.

TEA

Tea output has remained virtually stagnant since 1966. This has been principally due to the decline in prices and the low returns to the industry which have led to both a fall in the application of fertilizer and to a decline in maintenance standards in some estates.

The following programmes are proposed for the tea industry with the object of increasing the production and the quality of tea :—

(1) Replanting where necessary with high yielding new varieties of vegetatively propagated tea.

(2) The continuation of the tea factory modernization scheme. 200 of the 825 tea factories have already benefited from this scheme. This programme seeks to modernize all tea factories during the Plan period.

(3) Increased application of fertilizer by providing it at a uniform price to all users.

A Tea Board will be established to co-ordinate policies with regard to the tea industry. Priority will be given to the Crop Diversification Project to grow other crops on land freed from uneconomic tea.

RUBBER

Out of the estimated acreage of 569,000 acres under rubber 321,000 consist of replanted rubber and of new plantations and 248,000 of old rubber. Approximately 75,000 acres are unsuitable for rubber and are planned to go out of production. The effective acreage will therefore be around 500,000 acres.

Rubber production has been increasing steadily as the newly replanted acreage was brought into tapping. But on present replanting rates which have fallen well below the target of 15,000 acres per year, the entire acreage of 500,000 acres can be brought under replanted rubber only by 1984. It is necessary, therefore, to accelerate the replanting programme to at least 15,000 acres annually. Administrative and legal machinery will be set up to ensure replanting programmes on this scale. As in the case of tea, fertilizer will be made available to all users.

The quality of the processed rubber will be improved. Five factories will be established to manufacture block rubber and additional factory capacity will be created to manufacture approximately 2,000 tons of pale crepe. In order to help small-holders to produce better quality smoked sheets co-operative processing centres will be established under the Divisional Development Council Programme.

COCONUT

The coconut industry which is a key sector of the economy has been allowed to decline for many years. Past policies have clearly failed, and urgent steps are necessary to rehabilitate this industry vital both for its export earnings as well as for its importance in the domestic consumer budget. Both the fertilizer and replanting schemes have failed to keep pace with needs, and policies with regard to the enforcement of these programmes have to be implemented on a new basis. The Coconut Development Authority will be given the power to compel owners of estates to carry out approved programmes of manuring, replanting and inter-cropping. The policies proposed for the development of the coconut industry are as follows :—

(*a*) Under the coconut fertilizer subsidy scheme a selective fertilizer application programme will be undertaken giving priority to coconut lands which would respond rapidly to fertiiizer. About 250,000 additional acres are estimated to come into this programme and the annual fertilizer intake of the coconut industry is planned to increase from the present 60,000 tons to 120,000 tons annually.

(*b*) The coconut subsidy scheme whereby seedlings are issued to growers at a subsidised rate and where a subsidy is given for the block replanting of coconut land will be continued.

(*c*) One of the main problems in the coconut industry has been the neglect of coconut small-holdings which are about 65 per cent of the total coconut land in the country. The Coconut Development Authority will give high priority to improving credit and marketing facilities, and management practices in this sector.

(*d*) The extension and advisory services will be strengthened by a doubling of the present cadre and the establishment of divisional offices in coconut growing areas.

PADDY

Paddy production has shown a sustained increase over the past fifteen years. The introduction of high-yielding varieties, the improvement of cultural practices through better extension, the expansion of rural credit, the tenurial reform introduced under the

Paddy Lands Act and new land development, all contributed to the increase in paddy production during this period.

For the Plan period, programmes have been framed to increase the use of fertilizers, weedicides and pesticides. Fertilizer will be made available at a greater number of points. A programme of rural credit will be organised by the primary co-operative societies and the People's Bank and those defaulting on the repayments of previous loans will be brought back to the credit scheme by a programme of gradual recovery. Investments will also be made in paddy storage.

The programme of investment on irrigation and land development will provide nearly 100,000 acres of new irrigated land for paddy and also irrigate another 180,000 acres already under paddy. According to estimates, about 80 per cent of the increase in paddy production will come from already asweddumised land with the remainder being accounted for by the 100,000 acres of land to be asweddumised during the Plan period. The following table gives the output projections for the Plan period.

Table 5

PADDY OUTPUT DURING PLAN PERIOD

	Output Projections (million bushels)				
	1972	*1973*	*1974*	*1975*	*1976*
1. On land already asweddumised	77	90	95	101	107
2. On land asweddumised after 1971	1	4	5	6	9
3. Total	78	94	100	107	116
4. Less 10 per cent for seed and wastage	70	85	90	96	104
5. Rice equivalent ('000 metric tons)	1,003	1,192	1,275	1,372	1,478

If production during the Plan period keeps to schedule, domestic production of rice will meet nearly 97 per cent of the demand by 1976.

Finally, the entire working of the Paddy Lands Act will be reviewed to remove anomalies which yet lead to eviction of tenant cultivators.

SUBSIDIARY FOOD CROPS

Import-substitution in subsidiary food crops is a vital element in the whole strategy of the Five Year Plan. Apart from its impact on employment, it is one of the most significant means by which the country's meagre foreign exchange resources could be conserved and utilized for development. The expenditure on foreign exchange on pulses (i.e. green gram, black gram, dhal), onions and chillies in 1970 was approximately Rs. 140 million.

Policies have been framed for stimulating the production of these crops. 68,000 acres of irrigated land will be released from the new irrigation schemes for the cultivation of these crops. Double cropping of the land will be encouraged through better water management and more economic use of water. An extensive programme for the growing of chillies and other crops in home gardens will be implemented.

By raising the guaranteed price, banning the import of some items and progressively restricting the import of others, an incentive will be given to producers. The Divisional Development Councils will play an important role in the expansion of production in this field. The following table gives the estimated increase in the production of each of these crops.

Table 6

PRODUCTION OF SUBSIDIARY FOOD CROPS ('000 CWTS.)

	Production in 1970	*Projected Demand 1976*	*Production Target 1976*
1. Dried Chillies	125	670	600
2. Onions	716	2,400	2,400
3. Pulses	51	1,814	265
4. Maize	409	800	660
5. Sorghum	1	340	23
6. Oil Crops—(*a*) Soya Bean	—	—	63
(*b*) Groundnuts	132	—	266

Of the subsidiary food crops enumerated in Table 6, soya bean offers a promising new field for expansion. There is reason to conclude that it would be readily acceptable to farmers for cultivation as a rotational crop in irrigated land. The main constraint however is the absence of an organised market. Soya bean has a wide variety of uses—edible oil, animal feed, soya flour, soya milk and numerous industrial applications. It is superior in protein value to pulses, milk, eggs and many other popular items of protein food. Therefore the Plan includes a special effort for the development of this crop. Effective arrangements will be made to provide an assured market for the output, and supporting investments for processing and the full exploitation of its potential will be undertaken. On the results of the initial efforts, the Plan targets for this crop will be revised upwards if feasible.

MULBERRY

There is a firm export market for natural silk and Ceylon could profitably enter this trade. Natural silk could also be an input of the domestic textile industry. A central unit of approximately 200 acres has been established at Pallakelle Estate to undertake :

(*a*) the production and multiplication of mulberry and silk worm,

(*b*) research and extension work in sericulture.

On the basis of the performance of the pilot project, an extension programme for small-holdings and estates will be carried out with incentives being granted in the form of subsidies and loans for initial capital costs and guaranteed prices for cocoons.

CASHEW

There is a considerable market for cashew abroad and it is planned to increase the acreage under this crop. At present total domestic production amounts to about 18,000 cwts. from scattered holdings. The Ceylon State Plantation Corporation will develop approximately 20,000 acres. An additional 5,000 acres will be alienated as small-holdings and the necessary advisory and extension services and state assistance for the establishment of processing centres will be provided.

HORTICULTURE

A major expansion of horticultural products is planned. Pineapples, passion fruit and mango are the main crops in this programme. Credit schemes will be organised for land clearing and fencing, purchase of planting materials and fertilizer. Subsidised fertilizer will be issued as an incentive to growers under the proposed fertilizer subsidy scheme for all crops. This is another field where the Divisional Development Councils can stimulate production and marketing.

The expansion of these crops is mainly based on a plan to increase exports. A necessary condition for this is the expansion of processing facilities. The supply of fruits on a contract basis to the state-owned factories will be encouraged in order to assure the cultivator of a firm market. The general export plan will seek means of expanding the foreign market for these products.

VEGETABLES

Special production and marketing programmes will be undertaken during the Plan period for the expansion of vegetable production. The main features of the programme would be the following :

(*a*) Intensification of production in existing vegetable growing areas of Badulla, Kandy, Nuwara Eliya, Matale, Ratnapura, Kurunegala, Puttalam, Chilaw and Colombo, by improving fertilizer supplies, credit facilities, market intelligence, and the entire organization for marketing.

(*b*) Expansion of production under Mahaveli and Uda Walawe projects.

(*c*) Expansion of off-season production of vegetables under pump and gravity irrigation in selected areas.

(*d*) A programme for the reduction of the high percentage of waste in handling and marketing of vegetables by improving facilities for packing, transport and wholesale marketing.

(*e*) Marketing of vegetables through co-operative organisations.

COCOA

There is a large potential for expanding cocoa cultivation especially for export. The present acreage under cocoa is estimated at 25,000 acres. This includes mixed and pure planting. About 45 per cent

of the total constitutes holdings larger than 30 acres, of which 7,500 acres are in well-managed plantations. Whilst the average yield is very low—½ to 2 cwts. per acre—yields of 6 to 8 cwts. are possible. Steps will be taken to increase the yield on the present acreage as well as to extend the acreage under cocoa cultivation by planting of uneconomic tea and rubber lands. The benefits of the new planting will be realised only after the Plan period.

Essentially, what is required is replanting the present acreage, which mainly consists of ageing plants, with a high-yielding variety. The cocoa replanting subsidy scheme introduced in 1965 offered a subsidy of Rs. 850 per acre and had a replanting target of 500 acres per year. Progress under this scheme was very poor and only about 400 acres were replanted during the six-year period. A new scheme increasing the grant has been framed in terms of a subsidy and loan scheme. Further, a selective fertilizer programme will be undertaken covering the well-managed plantations, and cocoa will be brought under the fertilizer subsidy scheme.

The planned rate of new planting will be 2,100 acres per year, primarily on uneconomic tea and rubber holdings.

An advisory and extension service for cocoa will be established together with nurseries for the supply of plants. The proposed research institute for minor export crops will include cocoa.

COTTON

During the Plan period 24,000 acres of irrigated land on the right and left banks of the Walawe will be cultivated with cotton. About 18,000 tons of medium staple seed cotton will be produced.

The land is to be alienated to individual cultivators so as to avoid the problems which have arisen by using hired labour for large-scale cultivation. The allotments will be blocked out so that they belong to distinct units of 500 to 1,000 acres which could be worked collectively or co-operatively for the main agricultural operations such as tillage, pest control and seed treatment. Cotton will be made a compulsory crop for Yala cultivation in a major part of the Walawe Scheme. A choice of crops will be allowed for the Maha season. A credit scheme and extension services will support the cotton programme.

Further, a guaranteed price will also be offered for cotton in order to provide a stable market for this product and yield a reasonable income per acre in comparison with other crops. Cotton seed and linters are important by-products of cotton and these will be put to further industrial use. The excess capacity in coconut oil mills will be used to extract cotton seed oil.

SUGAR

The following table shows the targets for sugar production :—

Table 7

PROGRAMME FOR SUGAR PRODUCTION

	Production in 1970 (tons)	*Production Target 1976 (tons)*
1. Kantalai	4,667	16,000
2. Gal Oya	3,428	20,000
3. Walawe	—	8,000
4. Small Scale	—	7,000

The capacity at the two factories is approximately 50,000 tons whilst production in 1970 was only about 8,000 tons. There have been two aspects to the failure of this industry. On the one hand the yield of sugar cane per acre cultivated has been low and on the other the recovery of sugar has not been satisfactory.

Poor yields have been due to a number of factors — inadequate irrigation facilities in Kantalai, poor drainage in Gal Oya, the absence of a well conceived programme of research for development of high-yielding varieties. Steps will be taken to remedy these defects. With the completion of Stage I of the Mahaveli Scheme by late 1974 irrigation facilities at Kantalai will be improved.

Recovery of sugar has been unsatisfactory because of the poor maintenance of machinery and equipment. A complete programme for the renovation of plant is being undertaken. These measures alone, however, will not rehabilitate the industry. The fundamental problem in the sugar industry is the weakness of overall management and this has to be remedied if the industry is to be rehabilitated.

The acreage under sugar will also be increased by the opening of lands under the Uda Walawe Project. Further, under the Divisional Development Councils Programme small-scale sugar units for the cultivation and processing of sugar cane will be set up in areas such as Badulla and the Galle districts which are agro-climatically suited for the crop.

MANIOC

Manioc is one of the most popular home-garden and chena crops, requiring little capital and labour. Hitherto manioc has not been cultivated for use as a raw material in industry. During the Plan period the cultivation of manioc for industrial purposes will be organised.

Manioc tubers could be processed into:

(*a*) chips for animal feed,

(*b*) sago and glucose as food items,

(*c*) starch for industry, and

(*d*) flour to be blended with wheat flour, for bread making.

This could lead to an appreciable saving of foreign exchange. The overall yield during the recent past had been about 2·4 tons per acre. This is low in relation to the world average of 3·4 tons per acre. However, the Department of Agriculture has reported a yield of 10 tons per acre with the use of fertilizer. Steps will be taken to increase the acreage under manioc and increase yield by fertilizer use. Starch and sago factories will be set up under the Divisional Development Councils Programme to process manioc.

KENAF AND SUNHEMP

Kenaf has been grown as a traditional crop in the dry zone chenas for its fibre, and is suitable for marginal lands as a rain fed crop. It is considered one of the best substitutes for jute in the manufacture of gunny bags. Currently, research has established that kenaf could also be used as a pulp in paper manufacture. The total acreage required for import-substitution of long fibre pulp, and to satisfy 50 to 60 per cent of the gunny bag demand in 1976 is estimated at 13,500. For these purposes kenaf will be developed as a part of the import-substitution programme.

The traditional use of *sunhemp* has been in the making of fishing nets, cordage, cloth, sacks, twine and rope. Besides these uses it has been found that it can be used as a pulp for making high quality paper. This crop can be grown successfully in rain fed conditions in the dry zone. Cultivation of this crop will be initially undertaken on an experimental scale and depending on the results, a larger programme will be implemented.

OTHER MINOR EXPORT CROPS

The Plan envisages a considerable increase in the exports of several minor crops such as cinnamon, pepper, cardamom, cloves, nutmeg, citronella, lemon-grass, castor and sun-flower. Production of these crops will be expanded. The acreage will be extended by new planting and the existing plantations rehabilitated and replanted where necessary. Programmes for fertilizer application will be implemented and the export promotional effort strengthened. An organisation for research into the problems of minor export crops will be established. Purchasing Boards will be set up for certain crops which have been affected by price instability and marketing problems. Some of these minor export crops will be grown in the crop diversification project for uneconomic tea and rubber lands.

Cinnamon

The present acreage of cinnamon is about 36,000 acres with a production of 3,000 tons. The world production of cinnamon was 5,000 tons in the year 1967. 4,000 new acres of this crop will be planted during the Plan period. The productivity of the existing plantations will be improved through a programme for the application of fertilizer.

Pepper

Pepper is grown in the country entirely as a mixed crop, both on large estates and small-holdings. Production is estimated at 1,600 tons of which 900 tons were exported in 1969. As there is considerable scope for expanding pepper production, the acreage under pepper will be expanded during the Plan period.

Cardamom

The area under cardamom is presently estimated at 9,500 acres, mainly grown on plantations. The acreage will be expanded by about 6,000 acres. Fertilizer application will be encouraged under the subsidy scheme.

Cloves

This crop is presently grown as a garden or mixed crop in small-holdings. The effective extent under cultivation has been estimated at approximately 1,500 acres. This will be increased by about 4,000 acres during the Plan period.

Nutmeg

The present position with regard to nutmeg is similar to that of cloves. The estimated area under production is placed at approximately 2,500 acres. About 2,000 acres of new planting will be undertaken during the Plan period.

Citronella

At one time Ceylon had 35,000 acres of this crop under cultivation. In view of the lack of demand in the past, almost 20,000 acres were replaced by coconut. At present the acreage is estimated at about 15,000. The plantations are old and have been badly neglected. There has however been an increasing industrial demand for the citronella produced in Ceylon, on account of its special properties. A programme for the rehabiliation of citronella industry will be implemented during the Plan period.

Lemon-grass

This is a new crop and is therefore in the preliminary stages of development. Research by the Department of Agriculture and the CISIR has shown the possibility of its successful cultivation, on a commercial basis. The present acreage of nearly 200 acres will be expanded to 5,000 acres during the Plan period.

Oil Palm

This crop has already been introduced on an experimental basis. The possibility for development of this crop on a larger scale during the Plan period is being examined.

Castor

Castor can easily be grown in the country and initial trials in the dry zone have indicated that it could be successfully cultivated as a rain-fed crop on marginal lands. There are at present about 140 acres under castor. An additional 500 acres will be cultivated to meet the domestic demand for castor oil. Export possibilities for this oil will also be studied during the Plan period.

Sun-flower

Preliminary trials have shown that this crop can by cultivated in the agro-climatic conditions of the dry zone successfully. Experimental work is in progress on the selection and testing of high-yielding strains and on its agronomy. This crop will be considered for development during the Plan period.

FLORICULTURE

It is planned to increase the total acreage under flowers grown for export from the present 15 to 170 acres in 1976. The total production is expected to increase from 1·3 million units of cut flowers to 14·5 million in 1976. The total foreign exchange earnings from the planned output would be in the region of Rs. 15 million in 1976. A government marketing organisation will be set up to undertake marketing and export of cut-flowers. An advisory organisation, consisting of representatives of growers, exporters and government departments, will be set up to oversee the industry and advice the Government on its future development.

OTHER PROGRAMMES

The Agricultural Plan will include a variety of other minor programmes which will help in the diversification of small-scale agriculture and the raising of incomes in the rural sector. These include papaya for papain, gingelly for vegetable oils, ginger and turmeric, millet, bees-honey and mushrooms. The export prospects for bees-honey and mushrooms make these two programmes particularly important. Bee-keeping will be encouraged in selected areas. The programme for mushrooms will be initially undertaken on an experimental basis and subsequently expanded. Both these items can be appropriately included in the small-scale projects and programmes that will be implemented by the Divisional Development Councils.

Animal Husbandry

Meat, eggs and milk are food items which are very sensitive to income increases among the lower and middle income groups. The production of some of these items has not kept pace with demand, and hitherto there has been no sustained programme to develop animal husbandry.

An improvement in the living standards of the rural and urban poor should be reflected among other things in the quality of their diet. Such an improvment requires a pl ntiful supply of the basic protein food items. Under the crop programmes lentils, pulses, soya bean, groundnut all of which are rich in protein have been given special emphasis. The major supply of high protein food however will come from the animal husbandry programme.

Furthermore, in the programme of import-substitution, as well as in the diversification of peasant agriculture, the expansion of animal husbandry is assigned very high priority in the Plan.

During the Plan period the increases in domestic production of milk will be sufficient to replace all imports of full cream milk powder as well as butter fat and skimmed milk for the condensary. Programmes will be implemented to increase the output of butter, cheese and other milk products. A vigorous effort will also be made to increase the supply of mutton through the promotion of sheep farming. No major improvement is possible in the supply of beef in the short term, but there would be some increase in the production of beef during this period as a result of the programme for the production of milk and the consequent expansion of the herd. However, an increase in the per capita consumption of basic protein food items derived from animal husbandry is provided for in the planned increase in eggs, poultry, mutton and pork where large increases in production are possible in the short term without heavy capital investment. The main programmes required to achieve the output targets in this sector are as follows :

(*a*) The development of new pasture land. The developed pasture and grassland in Ceylon are estimated at approximately 30,000 acres. During the Plan period another 60,000 acres will be developed for pasture, in coconut lands and in the mid-country.

(*b*) Improvements and additions to stock by imports of stud bulls and heifers, for improving and expanding the milk herds. Parent stock for poultry will also be imported.

(*c*) Expansion of the network of milk collecting centres under the Milk Board, veterinary extension units, and a greatly accelerated and improved artificial insemination programme for the systematic upgrading of the herd for milk and beef.

(*d*) Extension services and credit arrangements to facilitate the setting up of piggeries and poultry farms.

(*e*) Development of sheep farming in the dry patanas and on coconut land, and import of stock for a rapid expansion of the herd.

(*f*) The establishment of a statutory authority to co-ordinate activities in this sector, formulate pricing policies, organise the marketing of meat and promote commercial livestock enterprise.

II—FORESTRY

The total extent under forest available for the exploitation of timber is about 200,000 acres in the Wet Zone and about 2,500,000 acres in the Dry Zone. The Plan provides for the extraction rate to rise from the present 6 million cubic feet per annum to about 12 million cubic feet by 1976. The details of the programmme of expansion are as follows :

(*a*) Sinharaja Project	3 million cubic feet
(*b*) Gilimale Project	1·5 million cubic feet
(*c*) State Timber Corporation at—	
(i) Moraketiya (ii) Dellawa (iii) Bambarakotuwa	1·2 million cubic feet
(*d*) Plywood Corporation Projects at—	
(*a*) Kannaliya (*b*) Dediyagala (*c*) Nakiyadeniya	1·0 million cubic feet

To support this programme of expansion 259 miles of road will be constructed.

The total capital investment on the above programme will be about Rs. 100 million over the five-year period.

The boron-treatment of rubber wood will make available additional supplies of timber. Timber resources will also be supplemented by supplies made available by clearings under new settlement schemes particularly under the Mahaveli Project.

The planned increases in timber supplies will make possible an expansion of the construction and furniture industries. By 1974 full import-substitution will also be reached in the production of tea chests of which about 75 per cent are currently imported.

At present, the reforestation programme consists of planting teak, eucalyptus, pine, jak, mahogany, semi-hard woods and other species. During the Plan period about 16,000 acres will be reforested per year. The proposed reforestation targets by species are as follows :

Table 8

ANNUAL REFORESTATION TARGETS (ACRES)

Species	*Chena Reforestation Scheme*	*Departmental Planting*	*Total*
1. Teak	10,000	—	10,000
2. Eucalyptus	1,000	500	1,500
3. Mahogany	—	2,000	2,000
4. Semi-hardwoods	—	500	500
5. Bamboo	500	—	500
6. Pines	—	1,500	1,500
Total	11,500	4,500	16,000

III—FISHERIES

Consumption of fish in 1970 consisted of the output of about 115,000 tons of the local fishing industry as well as the imports of 40,000 tons of dried and canned fish.

Current production and the output targets for fish are given below :

Table 9

PROGRAMME OF PRODUCTION

Source	1970 Production (tons)	1976 Targets (tons)	Percentage Increase
1. Coastal fisheries	100,000	124,000	24
2. Off-shore and deep sea fisheries	4,000	30,000	650
3. Inland fisheries	11,000	21,000	90

It is proposed to increase production by about 60,000 tons per year by the end of the Plan period. Allowing for the export of 6,000 tons consisting mainly of skipjack, the fish available for domestic consumption would rise by nearly 55,000 tons. The programmes of development for coastal fisheries, deep sea fisheries and inland fisheries are set out below.

Coastal Fisheries

Coastal fisheries, which at present account for 90 per cent of fish output, has more than doubled during the last 12 years. This has been mainly due to mechanization, which was carried out by issuing both 3½-ton mechanized boats and outboard motors. During the Plan period the issue of 3½-ton mechanized boats will be increased according to the following schedule :—

	1971	1972	1973	1974	1975	1976
Number of 3½-ton boats to be issued	200	300	400	500	500	500

At present about 500 outboard motors are issued per year. It is planned to increase this to 1,000 motors per year during the Plan period. A part of these issues will be for replacement, but the overall number of fishing boats with outboard motors will increase from 2,600 in 1971 to 5,300 in 1976. Suitable anchorage and repair facilities will be provided so as to make possible an increase in the number of fishing days per mechanized boat.

Deep Sea Fisheries

Nearly half the overall increase in fisheries output is expected from deep sea fisheries. At present the Ceylon Fisheries Corporation has 7 vessels for deep sea fishing. A large expansion of the island's fleet of

deep sea vessels is proposed during the Plan period with the addition of about 200 new vessels. The first two years of the Plan will be used mainly to determine the most suitable type of vessel in relation to available resources and the economics of operation after which an accelerated programme will be undertaken to expand the fleet to the strength required to attain the target for deep sea fisheries. These vessels will be deployed from the six major fisheries harbours—Galle, Trincomalee, Beruwela, Mirissa, Tangalla and Mutwal in which substantial investments have already been made.

Inland Fisheries

Present production estimated at 10,000 tons is low compared to what is possible in this field.

The Plan proposes a doubling of the production of inland fisheries from its present level of 10,000 tons by the following measures :—

(*a*) An increase of about 7,600 tons and 1,600 tons respectively by fuller exploitation of fresh waters and brackish waters. This will be done by increasing the number of fishing units operating commercially in the large low-country tanks, reservoirs, deeper lagoons and estuaries.

(*b*) An increase of 400 tons from fish culture ponds. A large number of small ponds ranging from about one eighth of an acre to half an acre will be constructed in areas of sufficiently high rainfall in the Central and South Western Regions.

(*c*) An increase of 400 tons from fish and prawn culture in brackish waters.

An integral part of the inland fisheries programme is the setting up of the fresh-water fisheries stations for research and extension work, one situated in the mid-country and the other in the Southern Province.

Shell Fish

An increase in the export of shell fish is a part of the Fisheries Plan. Export targets are 600–700 tons of prawns and 50 tons of lobsters by 1976.

The Ceylon Fisheries Corporation will invest in the freezing and transport facilities necessary for these programmes.

CHAPTER 4

INDUSTRY

Industrial Policy

ALTHOUGH in the period 1960–1970 the industrial sector showed noteworthy progress, the resulting pattern of industry was such that it had little impact on the economy. The manufacture of commodities of a non-essential nature entailed a continuing commitment on foreign exchange for import of raw materials. Furthermore, industrialisation during this period failed to take adequate account of the resource situation of the country. Emphasis was placed on the expansion of capital-intensive industries, to the relative neglect of the small-scale sector. The services needed for the development of small-scale industry such as credit facilities, extension services in marketing and technical knowhow and the institutional suppor necessary for the growth of a viable small-scale sector were not provided. Thus heavy strains were placed on the country's scarce foreign exchange resources without any significant impact on employment. In addition, in several instances investments which were made resulted in the installation of capacities which, in relation to the market, had necessarily to remain grossly under-utilized. This is true of a number of consumer goods industries as well as certain heavy industries such as steel.

The creation of a highly protected domestic market with high profit margins led to a situation, where effort was concentrated on production for domestic use. Thus, there was no impelling necessity to search for export markets. As a consequence, foreign exchange earnings of this sector remained insignificant and the machinery and organisational framework required for an export drive remained undeveloped.

The Plan for the industrial sector has been designed taking into account the following pressing needs of the economy :—

—the need to create employment opportunities ;

—the need to expand the production of essential commodities for mass consumption to meet the increase in demand consequent to the planned rise in incomes of the low income groups ;

—the need to establish the basic industries capable of providing the inputs for other industries. This will establish the inter-industrial links and the linkage between industry and other sectors of the economy which is necessary for sustained industrial growth ;

—the need to bring industry to the rural areas and thereby to supplement rural incomes by giving employment and providing a demand for raw materials originating in the rural sector ;

—the need to minimise the foreign exchange commitment for investment and raw materials ;

—the need to gear industrial growth to the export market.

Given the present foreign exchange crisis and the country's immediate needs, an appropriate sectoral investment strategy based on the most effective use of the foreign exchange available to this sector has been devised. The course of industrialisation will be consciously directed within such a framework.

The possible investment path to meet these requirements lies in basing the growth in this sector mainly on projects with low capital intensity. Since both in terms of output and employment, small-scale industry is very much less capital intensive than the other sectors, the Industrial Plan envisages a sharp swing towards the small sector. Estimates indicate that about Rs. 50,000 was necessary to give employment to one person in large-scale industry, while the parallel figure for small industry ranged from Rs. 250 to Rs. 1,000. During the Plan period therefore the large-scale sector will not be permitted to enter into production in those fields where production could be viable in the small sector.

The Plan objective relating to the emphasis placed on the production of commodities for mass consumption is based on several considerations. Foreign exchange costs make it impossible to continue the import of such products for a mass market. Such a market is implicit in

—the pent-up demand existing today ;

—demand that will be created by the expansion of employment in all sectors ;

—the need to balance the demand in the agricultural sector consequent on the increase in incomes generated by new agricultural programmes and by agrarian reforms.

Much of the increase in incomes will arise in the low income groups. Production must be geared to the needs of these groups, and priority given to the production of articles for essential household uses and to items needed for improved housing. Such a policy would also imply the rationalisation of existing industry and containing output in certain non-essential industries so as to reflect national priorities.

The Industrial Plan makes provision for the establishment of several large-scale basic industries. These are necessary for the production of several important industrial raw materials. The severe foreign exchange difficulties make it imperative that priority be given to reducing the foreign content of industrial raw materials. With regard to several of these items the investments required are large, and of a size where the capacity of one production unit could adequately meet the requirements of the Ceylon market for the next five to ten years. These basic industries will be in the public sector. Thus for example, the public sector programme will include investments in chemical industries, petroleum-based industries or basic metal industries.

No sizeable programme of industrialisation can get under way as long as all machines, spares and accessories continue to be imported. While the scope for import-substitution of heavy machinery for the large-scale sector would be limited, the fabrication of machines required for the small-scale units, a wide range of spares and accessories, items such as pumps and motors, offer an identifiable field for import-substitution and the expansion of the indigenous capital goods industries. Thus, it is essential to encourage the development of the machine-building industry in the country, the growth and development of which have been impeded by the unrestricted import of even the simplest types of machines. Therefore very high priority will be given, and every possible effort made in the Plan period to harness the skills and the untapped potential in the engineering industry.

One of the main drawbacks of earlier industrial programmes was their negligible impact on the rural sector, with regard to both employment and the utilisation of raw materials originating in that sector. The regeneration of the rural sector through a programme of agro-based and other small-scale industries constitutes a major element in the Plan strategy.

There is, however, the danger that a strategy designed primarily to overcome the two major problems of unemployment and the severe shortage of foreign exchange may create some sectors of industry where the potential for future growth is limited. These, while providing employment opportunities on a large scale, may only operate at subsistence or near subsistence levels, incapable of generating the surpluses needed for investment and growth. This will especially be so if industry has to rely solely on the domestic market. Industrial growth demands the creation of certain sectors where surpluses for reinvestment could be generated. Industry must generate a surplus over its cost of production if it is not to stagnate or depend on subsidies for its expansion.

In the small-scale sector the relative advantage of a cheaper supply of labour in relation to developed countries will be used to gear certain industries to export markets. In the large-scale sector, the size of investment required cannot be always supported by the domestic market alone. An export market becomes imperative if such investments are to be profitable. The growth of such an export sector will depend on the selection of industries which have definite export potential and the concentration of efforts at export promotion, market research, improvement of quality and design within these industries. The entire export effort necessary for the fulfilment of the Plan is discussed in Chapter 6. In the review of past industrial development, some of the major problems arising from the absence of an industrial policy geared to a planned programme of development have been mentioned. Therefore, measures for the rationalisation of existing industry have been included in the Plan.

The Industrial Programme

OUTPUT

Gross value of industrial output which was Rs. 5,438 million in 1970, is expected to increase, by the end of the Plan period, to Rs. 8,920 million at 1970 prices. This implies an increase in output of 64 per cent over the period—an average rate of growth of 8·6 per cent per year.

The share of industry in the Gross Domestic Product which was 13 per cent in 1970 will increase to 16 per cent in 1976.

Table 1

GROWTH OF INDUSTRY

	(*In Rupees Million*)			*Percentage increase between 1970 and 1976*	*Average growth rate*	
	1961	*1970*	*1976*		*1961 to 1970*	*1970 to 1976*
1. Gross Domestic Product (at 1970 factor cost)	7,773	11,760	16,822	43	4·7	6·1
2. Gross value of industrial output (at 1970 producers' prices)	3,095	5,438	8,920	64	5·8	8·6
3. Value added in Industrial Sector (at 1970 factor cost)	846	1,523	2,692	77	6·8	10·1

On the basis of expected increases in domestic demand, planned investments and existing capacities, the highest rates of growth are planned in the following industrial groups.

Table 2

RATES OF GROWTH FOR SELECTED INDUSTRIES

Sub-Sector	*Percentage increase in output 1972–76*
1. Rubber products (including footwear)	108
2. Machinery and equipment (excluding transport equipment)	100
3. Chemicals and chemical products	98
4. Textiles	95
5. Processed food and animal feed	83

The Plan visualises the holding of output at present levels, or permitting only marginal increases, in several non-essential commodities. Exceptions will be made when production is geared to an export market. The objective of this policy is primarily to conserve foreign exchange by minimising expenditure on certain low priority items. Further, such regulation will provide the necessary incentives for expansion in output of alternative products based on local raw materials.

A substantial part of the additional output expected during the Plan period will be obtained through fuller utilisation of existing capacity. Significant examples are steel (rolled steel and wire products), sugar, rubber tyres and tubes, coconut oil, kerosene cookers and stoves, aluminium holloware and soap.

In some cases relatively small investments are sufficient to achieve the output planned for 1976. These are salt, poultry and animal feed, saw milling, bricks and tiles, ceramic ware and sewing machines.

INVESTMENT OUTLAYS

The planned investment outlay in industry during the five-year period is about Rs. 2,240 million. This figure excludes the investment needed for the replacement of plant and machinery. Public sector investments amounting to about Rs. 760 million have already been approved in principle. In addition another Rs. 480 million will be taken up by projects which are currently under investigation. The other planned investment in industry during the Plan period is approximately Rs. 1,000 million. This will be in the private and co-operative sectors and includes large and small-scale units. It is estimated that the foreign exchange component of the new investment outlay of Rs. 2,240 million proposed will be about Rs. 1,190 million.

EMPLOYMENT

Employment in industry during the Plan period is estimated to increase by about 165,000. This estimate is based on the increase in output projected in each sub-sector and the labour-output relationships assumed in the Plan. In projecting the labour-output relationships account has been taken of the re-structuring of industrial production implicit in the emphasis given to the small-scale sector.

The output and employment projections do not take full account of industrial activity which is anticipated under the Divisional Development Councils Programme. Nor does it fully take into account the expansion in output and employment in the export sector to be developed during this period.

The scope for employment creation appears to be greatest in the following sectors :—

Textiles,
Wood products,
Mining and quarrying,
Light engineering,
Paper products, printing and publishing,
Structural clay products.

PUBLIC SECTOR

The principal consideration which governed investment in the public sector has been the emphasis given to basic industries such as steel, cement, tyres, chemicals and paper. This policy will continue. However, in some instances technical reasons have necessitated the installation of capacities much in excess of immediate demand. Output capacities of Public Sector Corporations in 1970 are shown in Table 3. As the figures indicate, there is at present considerable unutilized capacity in the following industries—textiles, sugar, steel, salt, tyres, hardware. Problems of management, labour relations, pricing have in various degrees prevented the public sector industries from realising an adequate return on their investments.

Output in the public sector, will increase from Rs. 730 million in 1970 to Rs. 1,481 million in 1976 (at 1970 prices). About 75 per cent of the output from this sector in 1976 will be realised from utilisation of plant and machinery presently installed. All industries now in operation in the public sector (except steel and hardware) will have to work at full attainable capacity if they are to meet the demand in 1976. In the case of steel, provisional estimates indicate that the anticipated demand for steel will be met if the steel factory worked at about 70 per cent of its capacity. Thus by 1976, demand will no longer be a constraint hindering the efficient operation of industries in the public sector. In view of the crucial role of the public sector industries in the national Plan it is essential that their

Table 3

PRODUCTION TARGETS FOR PUBLIC SECTOR INDUSTRY

Industrial Corporation	*Unit*	*Capacity 1970*	*Production*		*Remarks*
			1970	*1976*	
1. National Milk Board					
(i) Processed Milk	Thousand pints	59,250	32,105	59,000	
(ii) Condensed Milk	Thousand cans	25,000	14,676	25,000	
(iii) Powdered Milk	Thousand one lb. tins	12,000	11,921	12,000	
2. Ceylon Oils & Fats					
(i) Provender	Tons	60,000	48,720	100,000	Maximum capacity after expansion 120,000 tons
(ii) Fatty Acids	Tons	5,400	1,527	3,000	
(iii) Glycerine	Tons	5,400	170	300	
3. Sri Lanka Sugar					
(i) Sugar (Kantalai and Galoya only)	Tons	40,200	8,219	36,000	Product mix is variable within the 1970 total capacity
(ii) Spirits (Kantalai and Galoya only)	Thousand proof gallons	1,350	1,373	1,600	
4. State Flour Milling					
(i) Flour	Long tons	51,000	47,917	73,000	Total capacity to be expanded to 102,000 tons by 1973
(ii) By-products	Long tons	20,000	19,966	29,000	
5. National Salt (including private salterns)					
Salt	Tons	91,000	62,067	130,000	Capacity to be expanded during the Plan period

6. National Textiles					
(i) Yarn (Thulhiriya, Veyangoda and Pugoda)	Million lbs.	20·6	2·3	15·4	Capacity from existing and approved projects 21·9 million lbs. of yarn and 34·7 million yards of textiles
(ii) Textiles (Thulhiriya, Veyangoda and Pugoda)	Million yds.	27·1	5·1	32·1	
7. Ceylon Leather Products					
(i) Footwear	Thousand pairs	350	359	456	Increased production in 1976 obtained by working two shifts
(ii) Chrome Leather	Thousand sq. ft.	1,200	1,116	1,700	
(iii) Tanned Leather	Thousand lbs.	420	215	408	
8. Eastern Paper Mills					
(i) Paper	Tons	10,000	9,665	22,000	New capacity for 15,000 tons to be installed
(ii) Paperboard	Tons	—	—	12,000	New capacity installed after 1970
9. Ceylon Plywood					
(i) Gintota Factory—3 Ply Board	Million sq. ft.	30	24	43	Capacity in 1972 is 43 million sq. ft.
of which Tea Chests	Million	—	1·04	1·20	
(ii) Avissawella—					
Tea Chests	Thousands	—	—	3,250	From new capacity to be commissioned in 1972
Ply Boards	Million sq. ft.	—	—	12	
Chipboard	Thousand cu. ft.	—	—	265	
Sliced Veneer	Million sq. ft.	—	—	5·05	
Doors, Door Frames, Windows	Thousand units	—	—	360	
Lodging Furniture	Sets	—	—	8,500	
School Furniture	Sets	—	—	2,000	

Table 3—(*contd.*)

PRODUCTION TARGETS FOR PUBLIC SECTOR INDUSTRY—(*contd.*)

Industrial Corporation	*Unit*	*Capacity 1970*	*Production*		*Remarks*
			1970	*1976*	
10. Paranthan Chemicals					
(i) Caustic Soda	Tons	1,600	1,373	3,200	From expansion of Paranthan factory; maximum capacity 3,200 tons of Caustic Soda and 2,500 tons of Chlorine
(ii) Chlorine	Tons	1,200	577	2,500	
(iii) Table Salt	Tons	400	276	600	From improvements to existing plant
(iv) Hydrochloric Acid	Tons	1,000	190	1,000	
(v) Calcium Chloride	Tons	30	—	150	From expansion of Paranthan factory
(vi) Potassium Chlorate	Tons	50	4·5	230	Expansion of existing capacity to 250 tons
11. Ceylon Tyre					
(i) Tyres	Thousands	250	84	342	Mould capacity will be increased
(ii) Tubes	Thousands	152	99	256	
12. Ceylon Petroleum					
(i) Petroleum crude processed at Sapugaskanda	Million metric tons	2·04	1·81	2·27	Increased capacity from removal of bottlenecks in existing plant.
(ii) Blending plant	Million gallons	5·00	4·16	5·30	1970 capacity on one shift. Additional output by increasing working hours

13. Ceylon Fertilizer (Mixing)					
Mixed Fertilizer	Thousand tons	300	193	290	
14. Ceylon Fertilizer Manufacturing					
Urea	Thousand tons	—	—	250	Capacity to be installed is under investigation
15. Ceylon Ceramics					
(i) Ceramic ware	Tons	2,540	1,879	3,200	Expansion of kilns at Negombo and new capacity
(ii) Clay	Tons	5,000	3,610	5,000	
(iii) Floor Tiles	Tons	600	182	540	
(iv) Sanitaryware	Tons	500	545	1,230	From additional capacity
(v) Electrical Porcelain	Tons	—	—	300	From new capacity
16. Ceylon Cement					
Cement—KKS and Galle	Thousand tons	350	255	270	
Puttalam	Thousand tons	220	89	440	Additional capacity 220 thousand tons from Stage II
17. National Small Industries					
Bricks and Tiles	Millions	10·7	10·6	30·0	1970 capacity on one shift. Additional capacity of 23 million from Hanwella (17 million), Uswewa (2 million), Anuradhapura (2 million), Gal Oya (2 million)

Table 3—(*contd.*)

PRODUCTION TARGETS FOR PUBLIC SECTOR INDUSTRY—(*contd.*)

Industrial Corporation	*Unit*	*Capacity 1970*	*Production*		*Remarks*
			1970	*1976*	
18. Ceylon Mineral Sands					
(i) Ilmenite	Thousand tons	91	83	135	From expansion of capacity
(ii) Rutile	Thousand tons	11	2	12	
19. Ceylon Steel					
(i) Rolling Mill Products	Thousand tons	90	22·3	58·5	
(ii) Wire Mill Products	Thousand tons	12	5·5	8·4	
20. State Hardware					
(i) Agricultural Implements	Thousand Units	1,115	138	839	
(ii) Door and Window Fittings	Thousand Units	2,600	510	1,975	
(iii) Brass Fittings—Other	Thousand Units	207	33	194	
(iv) Cutlery	Thousand Units	720	189	631	
(v) Cast Iron Foundry Products	Thousand Units	82	5	35	

full potential should be realised. While a comprehensive programme for improving performance in public sector enterprises will be undertaken early in the Plan period, its success depends on the co-operative effort of labour and management.

Investment in public sector industrial projects will, during the Plan period, amount to approximately Rs. 1,240 million. Of this figure, about Rs. 760 million will be taken up by the following projects.

Table 4

INVESTMENT IN PUBLIC SECTOR PROJECTS

	Project	*Capital Outlay (Provisional) (Rs. Million)*
1.	Spinning and Weaving Mill	140·0
2.	500 Power Looms	5·8
3.	Paper Mill	110·5
4.	Urea Fertiliser Project	340·0
5.	Oleo-chemicals Project	53·0
6.	Ilmenite Factory—expansion	48·4
7.	Titanium Dioxide Project (preliminary expenses)	10·0
8.	Petroleum Refinery (removal of bottlenecks)	16·3
9.	Steel Foundry	5·5
10.	Structural Shop and Galvanising Plant	4·6
11.	Boron Rubber Wood Project	0·9
12.	Ligno Plastic Wood Project	0·7
13.	Paranthan Chemicals Plant—expansion	5·0
14.	Potassium Chlorate Plant—expansion	0·9
15.	Mahaweli Development Scheme Timber Project	5·0
16.	Graphite Mining and Processing	10·0
17.	Expansion of Flour Mill	5·0
	Total	761·6

In addition, investment will also be made for the further expansion of spinning capacity for cotton textiles for the production of about 6·5 million pounds of yarn.

Several of the projects in this group will have the effect of carrying forward the process of import-substitution in essential commodities. Others such as the ilmenite and graphite projects will process domestic raw materials and primary commodities for export. Another guiding factor in the choice of public sector projects has been the need to strengthen the linkages between industries by providing intermediate goods from domestic production.

Projects for further investigation are listed in Table 5. Of these projects, investment of the order of approximately Rs. 480 million will be undertaken during the Plan period on the basis of national priorities. Some of the projects in this category are directly linked to production for an export market, and the scale of investment may have to be revised in relation to detailed studies of export possibilities.

Table 5

PROJECTS FOR FURTHER INVESTIGATION

1. Textiles—
   (*a*) Finishing Plant
   (*b*) Waste Spinning Mill
2. Third Cement Factory
3. News-print Substitute Mill
4. Tissue Mill
5. Chlorinated Rubber Project
6. Petroleum Refinery
7. Steel—Stages II and III
8. P.V.C. Plant
9. Calcium Carbide Plant
10. Quick Lime Project
11. Fibre Glass Plant
12. Aluminium Rolling Mill
13. Bus and Lorry Chassis Project
14. Ceramics expansion
15. Agricultural Implements Factory
16. Tractor Assembly/Manufacture
17. Super Phosphate Factory
18. Tin Plate Manufacture
19. Second Caustic Soda/Chlorine Plant
20. Second Flour Mill
21. Machine Tools Project
22. Straw Board Mill
23. Coated Paper Board Mill
24. Soda Ash Factory
25. Jaffna Lagoon Scheme—Stage I
26. Synthetic Fibre Plant
27. Sheet and Pane Glass Project
28. Hardboard Factory
29. Match Factory
30. Electric Meters and Motors Project
31. Sponge Iron Project

THE SMALL-SCALE SECTOR

By virtue of its high employment potential and low utilisation of foreign exchange for machinery, this sector is basic to the development programme. Although in the past small industry was neglected, its contribution to employment and to national production was considerable. Estimates with regard to employment and output in the small-scale sector are tentative. Roughly about 70 per cent of employment and around 30 per cent of the value added in industry in 1970 was in the small-scale sector.

Existing small-scale industrial units could be classified according to the following categories :—

Textiles,
Wood products,
Mining and quarrying,
Non metallic mineral products,
Coconut products,
Food products,
Tobacco products,
Light engineering,
Printing and Paper products,
Leather products,
Rubber products.

Of these groups, textiles, mining and quarrying, food products and coconut products occupy an important role in the existing structure. Employment in small industry is dominated by the textile group.

The Plan proposes an approximate doubling of the net output of this sector by 1976. Expansion is planned on a broad front, involving all sub-groups. Particular emphasis is placed on hand-loom textiles, wood products, light engineering, rubber products, and mining and quarrying where annual rates of growth ranging from 12 to 15 per cent are planned.

In the past several items which could have been produced efficiently in the small-scale sector were permitted to be produced by large-scale units. Such policies have placed serious restrictions on the growth potential of small-scale industry. In certain commodity groups such as textiles, ceramics, wood products and metal products specified product lines will be reserved for the small-scale sector. Special attention will be given to organising the textiles and light engineering industries which are assigned a leading role in the Industrial Plan.

Textiles

A vital role has been allocated to the handloom sector where a very large increase in production has been planned. Handloom production during the Plan period has to increase from around 40 million yards in 1970 to a target figure of 90 million yards in 1976, and powerloom production from around 15 million yards to 50 million yards during the same period. Additional employment opportunities will be available in this field for about 40,000 persons during the Plan period. In order to realise this target it is essential that specific action should be taken to revitalise the hitherto neglected handloom industry. Problems relating to productivity, quality and marketing as well as unsatisfactory supplies of raw materials currently constrain the development of the handloom sector. Measures will be taken during the Plan period, particularly by the Small Industries Department, to correct this situation. The recently established Corporation for the purchase and distribution of yarn will ensure regular supplies to this industry. A programme will be undertaken to improve the quality of the product. The design centre of the Small Industries Department has been re-organised to produce designs capable of competing in international markets. As a part of this programme more jaquards and dobbies will be supplied to the handloom industry. Further, in order to improve and lower the cost of the handloom product, sizing units will be set up to supply single-sized yarn instead of the present double un-sized yarn. By reserving the production of certain types of textiles to the handloom sector, this sector will be given the opportunity of specialising in products for which there is an assured demand in the home market. Tentative allocations by type of textiles for the

planned annual output of 60 million yards of handloom products in the early part of the Plan period are shown below. These allocations will be increased during the latter part of the Plan period.

Table 6

VARIETIES TO BE PRODUCED BY THE HANDLOOM SECTOR

		Million Yards
1.	Sarongs	22·5
2.	Sarees	12·75
3.	Verties	3·75
4.	Shawls	0·75
5.	Plain cloth 36″	2·25
6.	Shirtings 36″	2·3
7.	Sheetings and Bedspreads 54″ × 48″	7·5
8.	Furnishings 48″	4·5
9.	Towels	2·6
10.	Others	1·1
	Total	60·0

Light Engineering

In the past the light engineering industry was neglected and simple types of machinery which should have been produced in Ceylon continued to be imported. The Five Year Plan assigns an important role to the light engineering industry. Its ability to act as a catalyst to industrial activities will be fully utilized.

A substantial part of the demand for spare parts and repair facilities which has grown with the expansion of industry, could be met by the domestic light engineering industry. Furthermore, the increase in output planned in the small-scale sector, will provide a market for simple types of machinery which can be domestically produced.

Programmes have been framed for the production of several items. These include—

Motor vehicle parts and accessories, such as leaf springs, silencers, filter elements, carbon brushes, gaskets, pins and bushes, bolts and nuts,
Textile machinery accessories,
Machinery for light industries,
Water pumps,
Electricity motors,
Metal toys,
Telephone receivers.

An Institution for Engineering Research and Development will be set up to examine the types of machines which can be made locally and to design prototypes for their manufacture. Research on the development of various machines such as pumps, presses and kilns has already been done. This work will be continued on a systematic basis, and will be accelerated according to the needs of the industrial sector. Further, this institution will in future examine the technical details of new projects in the industrial sector with a view primarily to determining the possibilities of local manufacture of component items in such projects.

Coconut-based Products

The output of industries based on coconut oil is expected to grow by 3 per cent per year during the plan period. This expansion is dependent on the one hand on the increase in production of coconuts as planned for in the agricultural programme, and on the other hand on minimizing waste in the use of coconut for household use. It has been found that coconut waste has a high proportion of oil which can be mechanically extracted. A programme supported by price incentives has been framed for collecting coconut refuse for oil extraction. The substitution of other vegetable oils such as oils from cotton seed, soya bean, ground nut and rice bran for coconut oil will be encouraged.

The expansion of industries based on coconut fibre is a part of the programme for the small-scale sector. The fibre resources now available are not being fully utilised. Problems of collection, lack

of retting facilities and marketing problems have impeded the growth of the fibre-based industries. The Divisional Development Councils in coconut producing areas will be called upon to play a leading role in developing the potential in the coconut-based industries.

Food Products

Production of palm sugar, jaggery, dried fish and maldive fish is planned for on an expanded scale. Further, the planned increases in fruit growing will necessitate the provision of canning facilities, if the output is to be processed for export. Canning plants for this purpose will be set up on a regional basis, under the Divisional Development Council Programme.

Other Products

Wood, non-metallic mineral products and rubber products are the other important groups where programmes for expansion of production have been prepared.

The consumption of wood products such as furniture, toys and building materials is expected to increase with the planned rise in the standard of living of the low income groups. At present the growth of this industry is handicapped because of the shortage of timber. This shortage has resulted in low levels of output and poor quality of furniture in terms of design and quality of timber. In order to meet this shortage, boron treated rubber wood will be produced and made available to the manufacturers of furniture and other wood products. Several plants for boron treatment, as well as small saw mills, will be set up on a regional basis under the Divisional Development Council Programme. Further, assistance for design improvement as well as for limited mechanisation will be given to small units in the industry.

Non-metallic mineral products comprise a wide range of commodities. There is a demand for these commodities both in the domestic and foreign markets. The growth of this sector has been impeded by the continuation of imports. A phased programme for

the reduction of these imports is being planned with the expansion of production under the Divisional Development Council Programme. The products under this sector include—

Ceramic ware,
Clay pipes and floor tiles,
Graphite crucibles and lubricants, pencil lead,
Sand paper,
Fire bricks,
School chalk Crayons, water colours,
Precipitated chalk,
Cement products,
Costume jewellery with semi-precious stones.

The production of several new items based on rubber will be undertaken during the Plan period. Production of items such as industrial hose, conveyor and transmission belting, rubber rollers for machinery and latex products, which are at present not produced locally, will be undertaken. Much of this expansion will occur in industrial units already engaged in related fields. Further production units will be set up in the planned industrial estates.

THE PRIVATE SECTOR

The broad outlines of the Government's industrial policy with regard to the roles of public and private sectors have been stated in the Throne Speech of 1970 as follows :—

> "The heavy and capital goods industries and other suitable basic industries will be state-owned. Other industries will be assigned to the co-operatives and to private enterprise."

In accordance with these principles, heavy industries and those basic to the further industrialisation of the country will be under State regulation, if not under direct State ownership. This will include that sector of industry which for reasons of scale and technology make State ownership vital in the national interest. Other areas of industrial activity will be available for development by private enterprise. The private sector is expected to play an important role in the programmes of industrial development and conform to the production targets of the Plan. The main effort of the private sector will be concentrated on the full use of existing capacities for producing, on the one hand, essential consumer goods for the domestic

market and, on the other, a wide range of goods for export. The initiative and the skills of the private sector are necessary for achieving the export targets of the Plan.

The estimated outlay of the private sector during the Plan period emphasises the contribution expected from it. The total investment in this sector including both large-scale and small-scale industry and co-operative enterprises will be approximately Rs. 1,000 million.

It will also be the policy of the Government to develop collective and co-operative forms of ownership, so that the benefits of industrial development may be more widely diffused throughout the country and distributed among a wide section of the population.

Existing public sector industries will be reorganised and expanded to provide an effective infrastructure for co-operative and private sector industry. Mixed enterprises in the form of joint participation between Government and private capital whether domestic or foreign will form an element of the industrial structure.

Agro-based Industries

A significant drawback in the existing pattern of industry has been its negligible impact on the development of the agricultural sector. A corollary of this has been the heavy dependence of the industrial sector on imported raw materials. The Plan visualises a radical change in this situation. Emphasis will be given to the development of an industrial sector producing a wide range of items based on domestic agriculture.

In addition to paper, wood products, ruboer and coconut-based products referred to earlier, new agricultural programmes will provide the following raw materials for industry :—

Manioc flour for industrial starch and for bread,
Vegetable fibres for textiles,
Vegetable oils,
Natural silk.

The import-substitution programme will be realised in two areas. As mentioned earlier, some of the public sector investments are designed to provide basic raw materials required for industrial growth. On the other hand, specific programmes in the agricultural sector have been designed to provide raw materials such as seed cotton, beedi leaves, maize, manioc and kenaf to a wide range of agro-based industries.

In a situation where cotton has to be imported, the foreign exchange benefits of the textile industry are negligible. The production of cotton therefore is an important part of the import-substitution programme. The target for cotton production is 18,000 tons per year by 1976, and this would be about 28 per cent of the demand for cotton in that year. The anticipated foreign exchange saving is about Rs. 15 million.

Until recently the entire requirements of beedi leaves for use as wrapping were imported. A programme has already commenced for the production of this item locally. This would result in a foreign exchange saving of nearly Rs. 6 million annually.

Projects have been prepared for the manufacture of industrial starch from manioc. The possibility of substituting a proportion of manioc flour for wheat flour in the baking of bread is being investigated by the C.I.S.I.R. in collaboration with the Tropical Products Institute in the United Kingdom.

Resource Surveys, Research and Development

A programme of research designed to identify and develop local raw materials, with possibilities of industrial application, has been assigned high priority in the Plan. Although in the past some items were identified on a laboratory basis, their use on an industrial scale has been limited.

Specific programmes prepared in consultation with research organisations to remedy these shortcomings will be implemented during the Plan period. As a first step the following possibilities have been identified :—

New process for oil and protein extraction from the coconut kernel,

Coconut cream,

Industrial uses of rubber wood and rubber seed,

Manioc flour for bread making,

New fibres for paper making,

Industrial carbon and chemicals from coconut shell,

Vegetable fibres, e.g., ramie, banana fibre, pineapple fibre.

Programmes of oil exploration and minerological surveys are also currently in progress.

Institutional Measures

The absence of detailed programmes for the main industrial sub-sectors consistent with the needs and resources of the economy has been a major drawback in the field of industrial development. The consequences for industrial development of unplanned and indiscriminate investments have already been highlighted. Surplus capacity in certain areas prevails alongside under-investment in others. Capital intensive investments have been made where conditions were ideal for small-scale development. The country cannot afford any longer such a misdirection of resources.

One of the main objectives of the Industrial Plan is to remedy these shortcomings. It is proposed to set up sectoral Boards for the more important groups of industries. Such Boards will, on the basis of detailed demand and resource studies, determine broadly the investment programme. The scale and the location of plant, and in the case of some products such as textiles, the allocation of production targets among units will fall within the purview of the sectoral Boards.

The heavy reliance on the small-scale sector during the Plan period will be matched by a corresponding effort to create the supporting framework of institutions to provide where necessary supervised credit, managerial skills and technical services.

It is anticipated that most of the small-scale industrial units will be established under the Divisional Development Council Programme. A scheme has been formulated for the Industrial Development Board, the People's Bank and the Department of Co-operatives to assist these small-scale ventures.

The Management Development and Productivity Centre will be strengthened so as to provide the necessary consultancy services and to undertake an intensive programme of training management cadres in public sector corporations. In addition the systematic evaluation of the performance of public sector corporations will be undertaken on a continuing basis and the institutional framework will be established for the purpose.

CHAPTER 5

ECONOMIC OVERHEADS

Policies

THE growth in the productive sectors during the period 1972–1976 will have to be supported by corresponding investments for the development of the infrastructure. The transport system has to be maintained and expanded to cope with the increase in passenger and goods traffic. Telecommunication facilities will have to be improved and expanded. Power generation will have to be increased to supply electricity to the expanding industrial sector, and for rural electrification ; the transmission network has to be extended. Investments have to be made on the ports to improve cargo handling as well as to create alternative port facilities in Trincomalee where there is a high potential for the development of an export-oriented industrial zone. It would also be necessary during the Plan period to build up the necessary merchant fleet which would reduce the present outflow of foreign exchange on freight charges.

The transportation system in the country suffered from comparative neglect during the sixties owing to the severe foreign exchange problem. During the major part of this period, sufficient foreign exchange could not be released for replacements as well as for the additional requirements of transport equipment. Although, towards the end of the 1960's, allocations were granted for the import of transport equipment, the maintenance and improvement of the road system itself could not be undertaken on the desired scale. In regard to passenger traffic however the sixties witnessed a significant expansion of the public transport system. A large number of bus routes were opened connecting rural areas with urban centres. A major investment on the conversion of rail transportation from steam locomotives to diesel locomotives was undertaken. However, little effort was made during this period to establish these services on a commercially sound basis. As a result, the Railway continued to incur heavy losses and the Ceylon Transport Board which at one stage operated at a marginal profit began to have serious deficits. It was evident that these services could not be operated on the basis of the fares charged from the public which were among the lowest in the world. The financial

situation resulting from this fare structure did not enable these agencies to produce the surplus necessary for reinvestment and to maintain satisfactory standards in the services they provided.

As in most other sectors of the economy, in transportation too, capacities already available are not put to best use. This is particularly evident in the lack of co-ordination in the use of available equipment in the road and rail systems both for passenger traffic as well as for haulage of goods Bulk commodities such as sugar which could conveniently be diverted to the railways to reduce empty running and increase the utilization of capacity, are at present transported by road. In passenger traffic, closer co-ordination is possible between road and rail both in regard to long distance transport as well as suburban traffic.

Owing to its high dependence on foreign trade, Ceylon is particularly vulnerable to fluctuations in the freight rates charged by foreign shipping lines. During the sixties there was a steady escalation in freight rates. This situation has focussed attention on the need for a national merchant fleet which could in time carry a substantial portion of the country's export and import cargo. At the same time, in regard to port development the major advances that are taking place in international shipping, the shift to containerisation and cargo vessels of larger tonnage make it necessary to examine the pattern of development for the ports of Colombo and Trincomalee.

In telecommunication high priority has to be given to the investment on developing the overseas telecommunication system. Here too, the major technological changes will soon render the present system inefficient. The speed and efficiency of the overseas telecommunication system has special relevance in a context where external transactions occupy an important place. In the development of the domestic telecommunication system, priority has to be given to economic and commercial needs, while the increased demand for private telephones would have to be assigned low priority.

In regard to economic overheads, the main objectives during the Plan period are as follows :—

(i) Expanding rail and road transportation to cater to the increasing demand for passenger and goods traffic and, in doing so, effecting maximum co-ordination between road and rail ;

(ii) Establishing the public transport agencies on a sound commercial basis which would enable them to generate the surpluses required for replacements and improvements to services ;

(iii) Implementing a co-ordinated plan of transport in the greater Colombo area which accounts for a substantial part of both passenger and goods haulage ;

(iv) Improving port facilities in relation to the changes in international shipping and the development of Trincomalee harbour ;

(v) Establishing a national merchant fleet with the capacity to carry a substantial part of the country's import and export cargo ;

(vi) Strengthening the rural infra-structure, improving the standards of existing agricultural roads and, where necessary, expanding the road network in the rural areas ;

(vii) Effecting the necessary changes and improvements to the external telecommunication system and developing internal telecommunication to cater to economic and commercial needs ;

(viii) Undertaking the investments required to generate additional power during the Plan period, the corresponding expansion of transmission network, and the programme of rural electrification.

Transport

The growth of passenger traffic is normally measured in terms of passenger miles, that is, the number of passengers multiplied by the mileage travelled. It is estimated that the passenger mileage would rise from a figure of 9,000 million in 1969 to approximately 14,500 million in 1976. Similarly in regard to goods traffic, the ton mileage is expected to increase from approximately 700 million in 1969 to 1,250 million in 1976. This increase in traffic will necessitate major investments on improving the highway and railway system and additions to the stock of transport equipment. The investment programme has however to be related to the best use of existing capacities in the available transportation system.

The cost of a passenger mile to the C.T.B. is estimated to be 5·5 cts. while it is 3·8 cts. for the railway, provided the average passenger load in both systems is about 60 per cent of capacity. Similarly, the cost of a ton mile by road is approximately 45 cts. compared to 25 cents by rail. For the railway however utilization of capacity at present is as low as 33 per cent for both passenger and goods traffic. These figures emphasise the need for fuller utilization of the railway and better distribution of traffic between road and rail, particularly in regard to passenger traffic in greater Colombo and transport of commodities such as sugar, tea, vegetables, petroleum and building materials. To achieve the desirable proportions in road and rail traffic, the services offered by the railway would have to be substantially improved. Transport to and from railheads would have to be effectively co-ordinated to compete with road transport in convenience and to attract traffic to the railway in the required volume. In the case of road haulage, available data on existing capacities and the pattern of goods transport indicate that the existing vehicle fleet would be sufficient up to 1976. Investments would be needed only for replacements. But if full use is to be made of the existing vehicle fleet in both the public and private sectors and any investment on additions to the fleet avoided, rail–road co-ordination will be essential. Special measures would therefore be taken during the Plan period to achieve the required degree of road–rail co-ordination.

The extension of the road system during the Plan period will be undertaken primarily in the agricultural areas and in relation to special projects requiring road transport of finished goods and raw materials. About 330 miles of minor roads and agricultural roads would be completed each year. The emphasis in other highway investments would be on maintenance of the existing system and essential improvements to it. A major programme for the replacement of bridges which are structurally weak and whose superstructures have deteriorated or which cannot cope with the increasing traffic, will form part of these investments. High priority has also to be given to the road improvements, in and around Colombo, which are designed to improve the flow of traffic, reduce congestion, and effect transport economies. These improvements will form one element in an integrated transportation plan for Greater Colombo. The studies on the co-ordination of transport in Greater Colombo

during and beyond the Plan period will also examine the feasibility of the electrification of railways for suburban traffic. Furthermore, studies will be undertaken to decide on the future improvements to the main highways leading to and from Colombo. These studies will indicate the additional investments required during the end of the Plan period and beyond it.

The investments on transport during the period 1972–76 are estimated as follows :—

Table 1

INVESTMENT ON TRANSPORT (1972–1976)

	Rupees (millions)	*Rupees (millions)*
1. Highway and track construction		432·7
(*a*) Construction and improvement of roads	67·0	
(*b*) Construction and improvement of bridges	118·2	
(*c*) Agricultural and minor roads and bridges	115·0	
(*d*) Railway track	75·0	
(*e*) Plant and equipment	57·5	
	432·7	
2. Road transport equipment		588·0
(*a*) Passenger transport	413·0	
(*b*) Goods transport	110·0	
(*c*) Other equipment	65·0	
	588·0	
3. Railway locomotives and rolling stock		312·6
	Total	1,333·3

Ports

With the major programmes of import-substitution in rice, fertilizer, cement, and subsidiary food crops, the total tonnage of cargo handled in all ports is not expected to increase. In fact, a forecast of cargo handling for the Plan period (excluding the new export sector) indicates that it would drop from the 1969 figure of 5·219 million tons (inclusive of oil) to 4·911 million tons in 1976. Port investment would therefore have to be directed mainly at modernising and improving the efficiency of port operations.

A significant improvement in cargo handling could be achieved during the Plan period with the completion of alongside berths in Colombo Port and the construction of new alongside berths in Trincomalee. In Colombo, the extension to the Queen Elizabeth Quay, the construction of the tanker berth, and the conversion of the present oil dock to provide alongside berthing, will contribute to an overall improvement in port operations. At the end of the Plan period Colombo would have in all 21 alongside berths which should be adequate for alongside handling of almost the entirety of the cargo passing through Colombo. Investments on equipment for mid-stream handling would be reduced to a minimum. However, a few mid-stream berths would still be required as ship arrivals will not be evenly distributed throughout the year and during periods of peak activity in the Port, mid-stream facilities will also be needed.

The speedy movement of cargo out of the Port warehouses is a prerequisite for the efficient handling of cargo, the speedy turnaround of ships, and the elimination of demurrage charges. The total transit warehouse area available at Colombo Port is 925 thousand square feet. This warehouse area would be sufficient to handle cargo that passes through this port if cargo on the average moves out within six days and if there is rational and efficient use of warehouse space. Among other measures, the co-ordination of activities between the importers, particularly the public sector organisations and the Port Cargo Corporation will be intensified during the Plan period to raise the level of port efficiency.

The new alongside deep-water quay, approximately 1,000 ft. in length, which will be completed during the Plan period will be a multipurpose quay which will provide facilities for container handling and handling of bulk cargo. These facilities will, to a limited extent, equip Colombo Port to adapt itself to the developments in international shipping. But it is the Trincomalee Port that offers incomparably superior conditions for the development of port facilities. As the import-export traffic generated internally will not justify a major investment on an alternate port, the development of Trincomalee has to be conceived as part of a new export sector. Initially, Government will invest on two alongside berths which will be adequate for the purpose of converting the handling of the present cargo passing through Trincomalee from mid-stream to alongside

handling. With these initial improvements the Government expects to attract foreign investment and, in stages, extend the Port facilities to cater to industries which could specially benefit from the natural advantages of the Trincomalee harbour.

There would be no major investments in other ports during this period. Dredging of Galle Port would be completed early so that full use would be made of the investments already made on alongside berths.

The total investment on port development during the Plan period would be approximately Rs. 122 million. The breakdown of this investment is as follows :—

Table 2

INVESTMENT ON PORTS AND SHIPPING (1972–76)

	Rupees (million)
1. Development of Colombo Port	31·3
2. Oil tanker berth	17·9
3. Plant and equipment	10·0
4. Trincomalee Port	26·7
5. Other outports	5·2
6. Coast protection	6·5
7. Other port investments	25·0
Total	122·6

Shipping

The establishment of a national merchant fleet is long overdue. The steady escalation in freight rates underscores the need for such an investment. An efficiently operated national shipping line could bring sizeable foreign exchange benefits. It would also enable Ceylon to enter the Shipping Conferences related to her trade and give her a voice in those organisations whose decisions can have a major impact on the country's foreign exchange budget. The Ceylon Shipping Corporation has already been established and a cargo vessel of 14,000 tons has been purchased. In order to ensure regular sailings and provide the services on the required scale the Shipping Corporation will acquire approximately 8 vessels with a total tonnage of approximately 100,000. In addition

the Corporation will initially acquire one 30,000-ton tanker, to be supplemented later with larger tankers on completion of the tanker berth. These investments will enable the Shipping Corporation to carry the major portion of the crude oil requirements of the Refinery and approximately 40 per cent of the balance cargo, by the end of the Plan period. The total investment on the tankers and vessels will amount to approximately Rs. 200 million.

Telecommunication

During the Plan period the investment on the improvement of overseas telecommunication will be assigned high priority. External telecommunication is at present on the high-frequency radio system. All the existing channels are scheduled, and the service is severely restricted. Further development of these facilities is also limited due to congestion in the high-frequency radio spectrum. The investment on an Earth Station which will link Ceylon to the Satellite Communication System will therefore be a major improvement in the external telecommunication system. Work on this project will be completed in 1975. In addition, the international telex and telegraph services will be strengthened. These investments will result in an efficient external telecommunication system which will be an essential part of the infrastructure that has to support the rapid expansion of export trade and tourism planned during this period.

Development of internal telecommunication will be continued on a selective basis so as to improve those parts of the system which have high priority from the commercial and economic point of view. The inter-dialling system in the Greater Colombo area will be strengthened, bottlenecks leading to congestion of telecommunication traffic in this area eliminated and the speed and efficiency of communication improved. The major provinces which have high priority in relation to telecommunication needs—Central, Southern and Western Provinces—are already being linked in an inter-dialling system with Greater Colombo. This project will be completed in 1973. Outside this inter-dialling area, the telecommunication facilities in areas where new agricultural programmes will heighten the level of economic activity will be improved on a selective basis during the Plan period.

The estimates of investments on telecommunication during the period 1972-76 are given below :

Table 3

INVESTMENT ON TELECOMMUNICATION 1972–76

	Rupees (millions)
1. Telecommunication development in Greater Colombo Area	6·6
2. Telecommunication development in Western, Southern and Central Provinces	47·3
3. Other telecommunication development	16·9
4. Earth Station and overseas telecommunication development	27·9
Total	98·7

Power

The total installed capacity for power generation including both thermal as well as hydro-electric units amounted to 261 megawatts (MW) in 1971. The total requirement of power is expected to rise from 211 MW in 1971 to 367 MW in 1976. Three hydro-electricity units are expected to come into operation during the Plan period. Work will commence on a fourth project which will be completed by the beginning of 1977. Stage II of the Maskeli Oya Project on which work has already commenced will add 100 MW to the system by the end of 1973. Polgolla will provide 21 MW by 1974 and Bowatenna another 15 MW in 1976. Samanalawewa with a capacity of 120 MW (on which work will commence during the Plan period) will be completed by the beginning of 1977.

With the installation of additional generating capacity there will be corresponding investments on transmission. The plantation sector will be fully served with power from the national grid; approximately 500 factories will be connected to the system during this period and the high cost thermal units will be thereby replaced. The ongoing programme of rural electrification of 500 villages will be completed and a new programme of the same magnitude undertaken and completed during the Plan period.

The load forecast and the power balance for the period 1972-76 are given in the following tables.

Table 4

FORECAST OF DEMAND FOR POWER

	1971	*1972*	*1973*	*1974*	*1975*	*1976*
Load Forecast (Million KWH)						
1. Domestic	64·13	67·98	72·05	76·38	80·96	85·82
2. General purpose	88·43	93·74	99·37	105·32	111·65	118·35
3. Small and medium industries	210·44	233·23	258·63	286·81	318·05	352·73
4. Large industries	167·16	224·97	302·66	353·91	461·67	508·97
5. Bulk supplies to local bodies	167·83	177·05	186·79	197·08	207·95	219·43
6. Street lighting	10·50	11·00	11·50	12·00	12·50	13·00
7. Total sales	708·49	807·97	931·00	1,031·50	1,192·78	1,298·30
8. *Losses* (15%)	125·03	142·61	164·32	182·06	210·52	229·15
9. Total	833·52	950·58	1,095·32	1,213·56	1,403·30	1,527·45
10. Load factor	54·70	54·75	54·80	54·85	54·90	54·95
Power Demand (MW)						
11. Maximum demand (MW)	174	198	228	253	292	317
12. Reserve requirements (MW)	37	37	37	50	50	50
13. Total requirement of Power (MW)	211	235	265	303	342	367

When this total demand for power is matched against the total capacity that would be available during the Plan period, the resulting power balance would be as follows.

Table 5

POWER BALANCE (MW)

	1971	*1972*	*1973*	*1974*	*1975*	*1976*
1. Total Power Requirement	211	235	265	303	342	367
2. Thermal :						
(*a*) Pettah	6	6	—	—	—	—
(*b*) Chunnakam	14	14	10	10	10	10
(*c*) Grandpass	50	50	50	50	50	50
3. Hydro :						
(*a*) Laksapana	50	50	50	50	50	50
(*b*) Norton Bridge	50	50	50	50	50	50
(*c*) Inginiyagala	10	10	10	10	10	10
(*d*) Uda Walawe	6	6	6	6	6	6
(*e*) Maskeli Oya—Project I	75	75	75	75	75	75
(*f*) Maskeli Oya—Project II	—	—	—	100	100	100
(*g*) Polgolla	—	—	—	21	21	21
(*h*) Bowatenne	—	—	—	—	—	15
4. Total	261	261	251	372	372	387
5. Surplus/Deficit	50	26	−14[1]	69	30	20

In addition, Samanalawewa is scheduled to be in operation by 1977.

The total investment on power for this period would be approximately Rs. 654 million. The details are indicated below :

Table 6

INVESTMENTS ON POWER

	Rupees (million)
1. Generation	362·0
2. Transmission	164·8
3. Rural electrification	50·0
4. Others	77·1
5. Total	653·9

[1] The deficit in 1973 will be met from reserve capacity until the commissioning of Maskeli Oya—Project II.

CHAPTER 6

THE EXPORT PLAN

A major factor that would constrain the rate of Ceylon's economic growth in the coming years is the shortage of foreign exchange. While the situation demands the utmost economy in the use of foreign exchange resources, it also demands a vigorous and sustained effort to increase foreign exchange earnings through exports.

In this context, one feature in the economic landscape has become increasingly evident. In both industry and agriculture the major potential for import-substitution would have been almost exhausted at the end of the Plan period. In agriculture, this applies to rice and the subsidiary food crops ; in industry, to textiles, paper, cement, fertilizer, plywood and a number of such items. In both sectors the urgent and compelling need to expand production for export is strikingly demonstrated. On the one hand the expansion of exports on a scale unprecedented in the past becomes imperative to close the widening gap between export income and import needs. On the other, the inherent limitations of the internal market will act as a severe constraint on growth, if output is planned solely for that market. The inter-industry links which are part of a viable industrial structure, such as the chemical industries, the petroleum-based intermediates, industrial processing of raw materials such as rubber can only be organised on a scale which demands a market larger than the domestic market. Therefore, the growth prospects of the late seventies, beyond the Plan period are critically dependent on the ability to create major new export sectors in the economy.

The Plan takes account of this overriding need and builds into the development strategy new elements of growth which would have to be effectively exploited during the Plan period. In agriculture, a number of new export oriented crops will be developed during this period, while the traditional exports will be planned to sustain a high level of exportable surplus. In industry, a selected range of products

will be the base for a new export drive. Two other facets of the export strategy will be the creation of an export processing zone and a concentrated effort at the expansion of tourism. The Plan has attempted to synthesize these elements into a national scale effort which commands the highest priority.

Indeed, under any circumstances, such an export drive would be no less important than any other segment of the Five Year Plan. In the context of the recent trend in international prices where a decline in Ceylon's export prices has been accompanied by a steep rise in the prices of imports, it has become a matter of economic survival. Although, at least in the case of tea, attempts are being made to arrest the price decline through international agreement, there is no reason to assume that the trend will not continue into the immediate future. It has been estimated that in order to achieve the planned targets of growth the value of exports must rise by 35 per cent over the five-year period, from its present level of about Rs. 2,000 million to around Rs. 2,700 million in 1976 (at current prices).

Although at first glance, the magnitude of the task might appear formidable the experience of other countries suggests that given the right policies it is well within the country's capacity. The major elements for an export drive of the required proportions are —

(*a*) the identification of areas of investment for creating new export capacity on a major scale ;

(*b*) a system of export incentives that will ensure adequate profits, competitiveness and quality ; and

(*c*) an overall authority for co-ordinating, directing and promoting the export drive.

Investment

It has been estimated that the new export capacity that needs to be created by the end of the Plan period would require investment of the order of Rs. 1,000 million. This would be in addition to the utilization of existing capacities in agriculture, industry and fisheries. About Rs. 200 million of this investment will have to be in the form of foreign exchange for the import of plant and machinery. A new export programme of these dimensions cannot

rest wholly on the effort of the domestic economy. Its success depends to a large extent on the ability of local products to enter foreign markets through a well designed programme of economic co-operation with other countries both in South and South-East Asia and in other parts of the world. Active policies for such collaboration will be pursued through the Plan period.

Role of Private Foreign Investment

Private foreign investment can make an important contribution to the economic development of the country. The capital contributions of foreign investors will help to augment the country's foreign exchange resources available for development. Even more important are the opportunities that foreign investment affords for Ceylon to acquire new technologies, modern managerial skills and export outlets. This is especially important as industrialisation and other activities such as tourist development are receiving the increasing attention of the Government in its search for new lines, to diversify the economic structure and lessen the country's heavy dependence on the tea and rubber industries. The Government welcomes foreign investment from all countries in certain specified fields, and on terms which are considered appropriate in the context of Government's general economic policies. Foreign capital would be encouraged to invest in Ceylon incorporating safeguards not only for the investor but for Ceylon as well, through, for instance, Government representation in the Boards of foreign enterprises, though not necessarily involving majority participation.

It is hoped that the capital-exporting countries will for their part minimize the restrictions they have hitherto placed on capital seeking investment abroad.

AREAS OF INVESTMENT

The development of the tourist industry is an area of activity which is receiving increased attention and support, and in which proposals for foreign investment will be welcome. The areas of investment suitable for foreign participation in this industry are hotel undertakings, tourist recreational facilities, tourist resorts and allied fields.

Another field in which opportunities exist for foreign investment is manufacturing industry.

In the industrial sector foreign investment could participate with State or private enterprise in the development of industries which

- use for the greater part indigenous raw materials ;
- produce primarily for export ;
- have 'technology producing' capacity which can foster indigenous machine building and repairing enterprises ;

Foreign investments will be encouraged particularly in industries in which

- the necessary technical skills are not available locally ;
- the cost of imported machinery is high and the capital contribution of the foreign investor will help to relieve the burden of Ceylon's foreign exchange resources.

PARTICIPATION WITH LOCAL CAPITAL

Proposals for joint ventures between the State and foreign State or private undertakings will be considered on a case-by-case basis and appropriate agreements negotiated. The main criterion in approving foreign investments will be the net foreign exchange benefit to the country.

If the proposal is for investment in the private sector, the undertaking should be in collaboration with local enterprise. The general rule will be that Ceylonese collaborators should hold the greater part of the shares and retain effective control. Relaxation of this requirement may be considered in exceptional circumstances.

Proposals for technical collaboration without any financial participation in either the public or private sectors will also be welcome.

Remittance of profits will be permitted, after adequate provision has been made for maintenance and replacement of assets.

In all matters relating to their business activities, foreign investors will be accorded complete equality of treatment with local investors. Details of the Government policy on foreign investment in Ceylon will be published in a White Paper.

Export Possibilities

As stated earlier, the Plan envisages an increase in export earnings from the current level of approximately Rs. 2,000 million to about Rs. 2,700 million in 1976. The export effort during this period can be considered broadly under three main heads :

—the major exports : Tea, Rubber and Coconut,

—the minor exports which consist of items such as spices, oils other than coconut, fibre and graphite which are currently exported.

—the new export sector.

No realistic strategy for the balance of payments during the Plan period can ignore the crucial role of the three major exports. Therefore the policies and programmes in this sector will be directed at improving the output and quality of these crops. When future price trends have been taken into account, substantial increases in output are required to realise the export earnings projected in the Plan. The management of this sector has to be maintained at a very high level of efficiency to attain these output targets, which in 1976 will still contribute over 65 per cent of the export income. In coconut, where world prices are likely to be relatively stable, a special effort has to be made to increase the exportable surpluses through an expansion of production. In the domestic market vegetable oils for which programmes are formulated in the agricultural sector should to some extent substitute for coconut. The programmes included in the agricultural sector are expected to result of an increase in coconut exports from the 1970 level which is the equivalent of 890 million nuts to the equivalent of 1,070 million nuts in 1976.

Minor products which are currently exported consist of both agricultural products, such as cinnamon, cloves, pepper and cardamom, as well as mineral and industrial products, such as graphite, ilmenite, fibre and oils. There is an expanding demand for spices in the world market especially in the United States, Europe and Japan. Ceylon can increase her trade in spices if local production is stepped up, and if quality control and marketing arrangements ensure a standard export product. The agricultural programmes in this group of exports provide for replanting as well as substantial extents of new planting. These however will yield full results only after the Plan period. The extension programmes for the application of fertilizer, the subsidy for fertilizer, and the organisation of marketing to assure the small producer of ready purchase and reasonable prices are expected to result in a sizeable expansion of output during the Plan period.

The increases of export earnings from the mineral and industrial group will be contributed mainly by ilmenite, graphite, coconut shell charcoal and essential oils. Programmes for the expansion of ilmenite and rutile production have already been formulated and are ready for implementation. A pilot plant for the production of titanium slag, a product of much higher export value, will be installed during the Plan period. The feasibility of further processing ilmenite to produce an artificial rutile which will substantially increase the export value of ilmenite will also be examined. In graphite, a programme for the modernization and rationalisation of the existing mines as well as the expansion of production will be implemented. The programmes for both ilmenite and graphite will result in the output increases required for the additional export earnings expected from these products. In regard to coconut shell charcoal, bristle fibre and essential oils, the possibilities for further industrial processing, improvement of quality and expansion of output will be fully exploited. These items offer scope for small-scale production under the programmes of the Divisional Development Councils. The required research, experimental work, extension services and credit facilities will be organised to provide

the necessary support. During the Plan period the foreign exchange earned from minor exports is expected to rise from Rs. 190 million to approximately Rs. 295 million. The export targets for selected minor exports are given below :

Table 1

EXPORT TARGETS FOR SELECTED MINOR EXPORTS

	1970 Value of Exports (Rs. million)	*1976 Value of Exports (Rs. million)*
1. Agricultural Exports		
(*a*) Cinnamon	30·0	38·5
(*b*) Cardamom	10·5	46·0
(*c*) Pepper	4·9	10·0
(*d*) Cocoa	10·6	12·5
(*e*) Tobacco	3·5	15·0
2. Industrial and Mineral Exports		
(*a*) Graphite	10·8	16·0
(*b*) Ilmenite	4·2	15·0
(*c*) Essential oils	3·5	6·0
(*d*) Coir fibre bristle	22·3	25.0
(*e*) Coconut shell charcoal	6·7	10·0

The export earnings from the two categories described above will still leave a substantial gap between the available external resources and the import demand generated by the Plan. This gap has to be met by new exports and the expansion of the tourist industry. The programme for the expansion of the tourist industry is outlined in a subsequent section. Tourism is expected to yield an additional foreign exchange income of approximately Rs. 140 million in 1976. As set out in Chapter 2, the Plan provides for a reasonable inflow of project and commodity aid which would support the development effort. When these additional resources have been taken into account, the residual gap which still remains and which would have to be bridged with new exports by 1976 is in the region of Rs. 530 million. The main elements in the new export drive are listed below :

—The new export drive will utilize to the full the existing capacities in the economy, particularly the surplus capacity available in industry.

—It will also exploit the export possibilities in many of the new agricultural crops that would be developed during this period.

The export products in the non-agricultural group in 1970 was Rs. 124·3 million. A major portion of the necessary export increase mentioned earlier will have to be generated by this group, especially by manufactured products. Although developing countries in general are facing a wide range of obstacles to the successful expansion of their manufactured exports especially in the form of tariff and non-tariff barriers in the developed countries, the experience of some of the developing countries in the past decade shows that given the right marketing techniques Ceylon can effectively meet this challenge.

During the past decade, world trade in manufactured products has been growing faster than world production of manufactures and it is expected that this rapid increase will continue in the future. In the light of this rapidly growing world trade in manufactured goods the prospects are very promising for the export of manufactures.

In addition to the export of " non-traditional " exports such as those mentioned above there is considerable scope for the further processing of our traditional export items, particularly rubber and coconut products. In rubber, it is possible to produce a variety of rubber goods for export, including tyres. At the same time natural rubber will be further processed into block rubber or crumb rubber. Possibilities exist for a chemical complex based on coconut, ranging from activated carbon to acids and fibres.

Further, apart from developing industries for the export of basic mineral sands and graphite, it is possible to process Ceylon's mineral wealth into exportable products such as glass and ceramics.

The surplus capacity in the industrial sector which can be successfully geared to an export market is around Rs. 250 million. A wide range of exportable products has been identified. The export targets for selected groups of industries and the main export items in each branch are given below.

Table 2

NEW INDUSTRIAL EXPORTS

	Targets for 1976 (Rs. Million)
1. Food Beverages and tobacco	35·0
(*a*) Beedies	
(*b*) Sauces, pickles, chutneys	
(*c*) Liquor	
(*d*) Wheat bran	
2. Textiles, wearing apparel	37·5
(*a*) Garments	
(*b*) Batik	
(*c*) Leather cloth	
3. Chemical products	42·5
(*a*) Glycerine and fatty acids	
(*b*) Vegetable oils and fats	
(*c*) Paints and polishes	
(*d*) Soaps, detergents	
4. Leather, rubber, wood and paper products	45·0
(*a*) Footwear	
(*b*) Tanned hides and skin	
(*c*) Tyres and tubes	
(*d*) Other rubber products (gloves, rubber mattresses, flooring toys, hose)	
(*e*) Plywood and sawn timber	
(*f*) Parquet flooring and other wood products	
5. Non-metallic mineral products	20·0
(*a*) Ceramic ware and sanitary ware	
(*b*) Graphite products	
(*c*) Cement	
6. Metal products (Including implements and tools, fittings, foundry products)	10·0
7. Machinery (excluding electrical machinery and transport equipment)	20·0
(*a*) Tea and rubber machinery	
(*b*) Rice hullers, threshers, commodity grinders	
(*c*) Water pumps	
(*d*) Boats	
8. Electrical goods	25·0
(*a*) Dry cell batteries, transistor batteries	
(*b*) Electrical cables, accessories, fittings	
9. Miscellaneous industries	15·0
Rubberised fibre, costume jewellery, plastic goods	

The gem industry has not been listed under minor exports as might have been expected, on account of the new organisational and marketing effort that will go into this industry. The high potential for export earnings in this industry requires that it be considered separately. The entire industry is being reorganised to eliminate the systematic smuggling which has hitherto prevented the country from obtaining the foreign benefits of this industry. Estimates of the illegal trade in gems vary widely. The high estimates are as much as Rs. 300 million per year. The Plan has conservatively estimated that the foreign exchange earnings from gems will rise to Rs. 50 million per year by 1976. This is an initial target and on the experience gained in 1972 and 1973, it might be possible to improve considerably on this.

The targets given in Table 2 are only an indicative list on which further work will have to be done during the Plan period. The excess capacities in a number of industrial units which will be used during the early part of the Plan period for the production of goods for export will progressively diminish as the domestic market for these goods increase. New capacities will be created by expanding the units which would have geared themselves to the export market. The investment that would be required for such expansion has been taken into account in the overall investment programme which has allocated nearly Rs. 1,000 million for the investment required in the new export drive.

The new agricultural programmes include a number of products with promising export possibilities. In the horticultural programme pineapple and passion fruit will be cultivated primarily for export.

Market prospects are very promising for cut flowers, fruits, and fruit juices, especially in Western and Eastern Europe. The difficulty so far has been that of generating sufficient production capacity to meet the growing demand, especially for pineapple and passion fruit. However, the export of fruit and fruit juices is a highly competitive field which requires well established marketing links between importers and suppliers, who are able to guarantee high quality standards and meet tight delivery schedules in the required quantities.

A range of other agricultural programmes can contribute in varying degree to the new export effort—these include mulberry, manioc, cashew, lemon grass, soya bean, sunflower, castor, papaya, bee-keeping and mushrooms. On the production programmes that have been formulated, export earnings from new agricultural exports are expected to contribute approximately Rs. 85 million by 1976. The export of fish mainly skipjack and shell fish for which a special programme has been included could realise approximately Rs. 16 million in 1976. The export targets for the major items in this segment of the export drive are given below.

Table 3

TARGETS FOR SELECTED NEW AGRICULTURAL EXPORTS—1976

	Rs. Million
1. Pineapple	8·5
2. Passion Fruit	15·0
3. Cut Flowers	15·0
4. Manioc Chips and animal feed	7·0
5. Bees Honey	5·0
6. Natural Silk	10·0
7. Lemon grass oil	6·0

Several projects have also been identified, which would have to be formulated in greater detail during the Plan period. Foreign participation for these projects will be negotiated. This will offer reasonably certain prospects for the export of the output which is in excess of the local demand. A third paper factory, a sheet glass factory,another cement factory are projects which fall into this category. Possibilities of production for export also exist in industries such as ceramics and wood-based products. Rubber wood chips as a raw material for pulp is likely to find a ready export market.

The export processing zone in Trincomalee is an important element of the new export drive. The location for the zone has been selected and plans for the development of the infrastructure including port facilities are being formulated. It is, however,

premature at this stage to provide estimates of the foreign investment or the foreign exchange income that would be available as a result of establishing this zone. The unique port facilities in Trincomalee are likely to attract the type of industries and industrial complexes such as ship breaking, ship repairs, petro-chemical industries which could benefit most from the economies in freight and handling which are offered by the deep water berthing in Trincomalee.

Tourism

The growth of the Tourist Industry in Ceylon is an important element in the Plan. The major expansion in tourism which is planned for the next five years is expected to yield foreign exchange benefits that give substantial support to the country's balance of payments. An organised effort for the promotion of tourism is already beginning to show results. Tourist arrivals have increased from 15,300 in 1966 to 35,500 in 1970. With effective promotion, the prospects for the growth of the tourist industry in Ceylon are undoubtedly very promising. With its scenic beauty, attractive beaches, places of historic interest, wild life and congenial climate, Ceylon can cater to a wide range of tourist interests within a limited and easily accessible area. The tourist programme, therefore, seeks to exploit this unique combination of attractions to the best advantage.

During the Plan period Ceylon expects to increase tourist arrivals from approximately 35,500 in 1970 to 220,000 in 1976. To achieve this, Ceylon would have to increase her share of the tourist traffic in the South Asian region which itself is expected to expand from approximately 720,000 visitors in 1969 to 1·6 million visitors in 1975. Ceylon's foreign exchange earnings from tourists as a result of this expansion are estimated at approximately Rs. 140 million in 1976. Apart from the substantial foreign exchange benefits which will accrue as a result of the expansion of tourism it will also create new employment opportunities in the economy—in the hotel industry, trade, transport and other services.

The main elements in the tourist programme during the Five Year Plan period are given below :

(*a*) *Tourist resort development*—The development of tourist resorts would be related to the most attractive tourist itinerary and will include the South Coast region, the ancient cities

the East Coast region and the two major resort developments which would be located to the North of Colombo and in Trincomalee. The last two are proposed for phased implementation between 1974–1976. The total investment on resort development will be approximately Rs. 42 million.

(*b*) *Hotel accommodation*—The total hotel accommodation available in Colombo city in the beach resorts and ancient cities consists of approximately 1,545 rooms. The hotels already under construction, projects already approved and the additional hotels that will be approved during the Plan period will increase hotel accommodation to a total number of 4,340 rooms by 1976. These facilities should be adequate to meet the requirements of the tourist traffc which is projected for 1976.

(*c*) *Tourist expenditure*—In order to obtain the full benefits of the tourist industry it is necessary to increase the tourist expenditure in Ceylon. At present it has been estimated that 52 per cent of the tourist expenditure is spent on board and lodging and 16 per cent on internal transport. The Tourist Board plans to increase the tourist expenditure by improving the recreational amenities which will include cultural items which would be of special interest to foreign visitors. It also proposes to promote the sale of Ceylon's products which are representative of indigenous crafts such as quality copper, brass, silver and tortoise shell work, batik wall hangings and carved wood masks. Ceylon's precious and semi-precious stones are also an important item of tourist shopping. The Ministry of Shipping and Tourism will establish sales centres for these products as well as improve their quality and design.

(*d*) *Aviation policy*—A sound aviation policy is an important pre-requisite for the expansion of the tourist industry. In 1976 it is estimated that between 25 per cent to 30 per cent of tourist traffic, approximately 60,000 visitors, would travel by chartered flights. The rest of the tourist traffic will depend on international and regional flights. It would not be realistic to make very precise estimates of the distribution of tourist traffic by the type of carrier, but it is necessary to have some forecast of the flight requirements, in order to promote

the required frequency of flights needed to carry the tourist traffic. Close attention has to be given to the aviation policy that should support the expansion of the tourist industry. During the Plan period there would be close co-ordination between the Ministry of Shipping and Tourism and the Ministry of Communication to increase the frequency of flights, and undertake the necessary expansion and improvement of airport facilities.

The details of the investment programme on tourism are in Table 4.

Table 4

INVESTMENT PROGRAMME IN TOURISM 1972–76

	Rs. Million
1. New hotels	252·2
2. Existing hotels	3·0
3. Trahsport—cars and coaches	30·9
4. Recreational amenities	·7
5. Publicity	39·4
6. Resorts	42·5
Total	368.7

During the Plan period, domestic tourism will be encouraged. The domestic tourists at present travel on pleasure, pilgrimage and education. Therefore a programme for the improvement of rest-houses and provision of facilities, holiday hostels, camping and picnic areas which would be within the means of the average local tourist will be undertaken.

The investment in the tourist industry is a major element in the private sector effort which is expected during the Plan period. A wide range of incentives has been provided for the promotion of investment in the tourist industry. These will be set out in the White Paper on Foreign Investment.

Export Promotion

Responsibility for different aspects of the country's export drive is diffused amongst several Ministries. For example, the production programmes for export are the responsibility of the Ministries of Industries, Agriculture and Plantations ; commercial policy and trade promotion fall within the Ministry of Internal and External Trade; with respect to tea and coconut certain promotional functions are also vested in the Ministry of Plantations. The Ministry of Finance is concerned with export incentives, customs facilities and exchange control measures. The Ministry of Planning has a crucial role in the planning of the foreign trade sector and in determining overall export targets. Thus the need for a co-ordinating authority is evident. It is proposed, therefore, to set up an Export Promotion Council composed of the Ministers concerned. It will be serviced by a secretariat in the Ministry of Planning and Employment working in the closest collaboration with the relevant Ministries and Departments, and particularly with the Ministry of Foreign and Internal Trade.

The proposed Export Council which will be directly under the Prime Minister and Minister of Planning and Employment will include Ministers in charge of the key Ministries of Foreign and Internal Trade, Industries and Scientific Affairs, Plantation Industries, Agriculture and Shipping and Tourism. The Council would be essentially a policy making body and its decisions would be binding, subject to modifications by the Cabinet. The main purpose of the Council will be to cut across the present time-consuming administrative and decision-making procedures.

Effective export promotion, however, is not merely a matter of organising internally for the production of exportable surpluses. Emphasis must also be placed on providing improved facilities for the effective marketing of Ceylon's products abroad by identifying new markets and obtaining access to them. This need is particularly great, because of the relative inexperience in international trade of Ceylon's exporters of new products.

It is therefore necessary that Ceylon's overseas missions should be reoriented to fit into the export effort that the country is now required to make. In the main, this reorientation would make

trade work (both active selling of Ceylon's products and export promotion) an integral part of the normal functions of these missions. For this purpose, the following measures will be taken :—

—Overseas missions will be strengthened and will be required to take responsibility for achieving agreed export targets ;

—Targets of export earnings will be set for each mission in consultation with the Ambassador concerned.

It has to be re-emphasised that the framework of targets provided for the export sector is only indicative of the wide range of possibilities and areas where the export effort should be directed. What has been enumerated in the account of the new export sector will certainly not exhaust the numerous possibilities which the economy offers. For example, pineapple and passion fruit do not exhaust the scope for exports in horticultural products. Exports in small quantities of various other tropical fruits could be undertaken. Quality furniture from high cost tropical woods is another possibility. Therefore during the Plan period the agencies responsible for organising the export drive will continue to search for new export possibilities.

What the new export drive attempts to do is to encompass the entire economy and involve all sectors both large-scale and small-scale in the effort to bridge the critical gap between the available external resources and the development needs. Consequently, even small export possibilities where foreign exchange earnings may be limited will be pursued, and individuals, small-scale units, and co-operatives will be encouraged to identify and undertake export enterprises.

CHAPTER 7

SOCIAL OVERHEADS

A—EDUCATION AND MANPOWER

SINCE the Free Education Scheme was introduced in 1945 there has been a rapid expansion of educational facilities at all levels. Government expenditure on education increased by nearly five-fold during the course of the last two decades—from Rs. 105·7 million in 1950–51 to Rs. 512 million in 1969–70. School enrolment increased during these two decades from 1·336 million to 2·679 million and the number of teachers from about 39,200 to about 100,000. On the part of the Government the chief concern was to satisfy the unprecedented demand for schooling by the quantitative expansion of facilities at every stage.

The unplanned expansion of educational facilities and the present problem of the educated unemployed raises a critical question, the consideration of which can no longer be postponed. It raises the question of the purpose of education. In this connection it often used to be said that education is an end in itself in that education raises the cultural and intellectual level of the population and thereby enables the enjoyment of a fuller life. Although this view dates back at least to Victorian times it is not entirely without relevance today. For it has to be recognised that the ultimate purpose of economic development itself is to enable people to lead a better, fuller and more satisfying life. If indeed that had been the ultimate outcome of the massive investment in education there would be no cause for alarm. However, experience has been entirely different. The failure, if not the inability, of the economic system to provide a meaningful and productive role for the output of the educational system has resulted in fear, frustration and despair rather than a net increase in social satisfaction. Thus it becomes evident that an educated population becomes a national asset only to the extent that it is able to fit into the productive occupations that the economy is capable of providing. Education therefore must also be looked upon as an investment in human resources which will contribute to the productivity of the economic system. The training, the skills, the attitudes and aspirations that are the product of the educational system must be related to the socio-economic environment. The content of education, the curricula, syllabuses and the numbers

under-going training in the different fields of knowledge must conform in broad outline to the country's occupational profile. The attempt to achieve a correspondence between a forecast of the future employment opportunities and the education and training of persons to take advantage of such opportunities is generally referred to as " manpower planning ". While such manpower planning and forecasting has inherent limitations, particularly in an under-developed economy, the fundamental correctness of this approach must not be overlooked. Today, the increasing gap between the knowledge, skills and attitudes generated by the school system and those required for rapid social and economic development has become more and more apparent.

This criticism of the system is neither new nor unique. In the past, several commissions and official committees have investigated various aspects of the system and suggested reforms within the existing structure. These included the amalgamation of grades to reduce the duration of the educational cycle, diversification of secondary education, expansion of science enrolments and increasing vocational and technical education. These programmes have had limited success, mainly because they have continued with the dualistic system where academic courses were considered prestigious and the others represented dead-ends.

At this point it would be relevant to consider the annual output of the school system in relation to the demand for various categories of skills and training. On the average the numbers entering the labour market from those who have reached at least the G.C.E. 'O' Level Class is about 143,000 a year. This consists of about 120,000 who leave at the G.C.E. 'O' Level, about 20,000 who leave at the 'A' Level and 3,200 who come out of the Universities.

The basic shortcoming of the country's educational system is that the academic type curricular are framed to cater to the needs of that small minority of the output of the educational system who having reached the G.C.E. 'O' Level compete for the very small number of jobs, available as doctors, engineers, administrators or teachers. Of the others, a small number obtain employment in the clerical, technical and service occupations, while the rest begin the interminable wait for the white-collar jobs that are not there. Judging from results it is no exaggeration to say that the social returns to educational investment have been negligible, if not negative.

It cannot be even remotely suggested that a mere curricular reform will by itself transform the nature of the problem of unemployment. The scramble for white-collar jobs is readily understandable in the prevalent structure of wages and salaries in the economic system. The scales of remuneration that are attached to the different occupational categories today bear no relationship to national priorities or to the relative scarcity of the different kinds of skills required for the country's development.

But a curricular reform can do at least two things. Firstly, it can equip the rising generation with knowledge and the skills necessary for development. Secondly, it can inculcate in them an appreciation of what activities are important for the country's development. In the final analysis it can also render both teaching and learning more interesting and more meaningful by relating it to the economic environment of the student, by relating it to the life that goes on around him. The main objective of the curricular change that is to be inaugurated from 1972 is to integrate the academic and vocational aspects of education in the general school system. It seeks to equip students with a good general education together with a basic familiarity with one or more vocational opportunities available to them. This does not mean any reduction in academic content. What it means is that the materials taught and the whole idiom of teaching has meaning for the student and will stand him in good stead when he leaves the system.

The pattern of an integrated academic and vocational curriculum commencing at junior secondary level, grades 6 to 9, will be continued at the senior secondary level. The curricular content will be designed in keeping with the requirements of further education as well as of the employment market.

In the Universities and other institutions of higher education changes would need to be made to diversify courses of instruction and to emphasise applied studies in the Arts and Sciences. While instruction in the Arts courses have been made available in Sinhala and Tamil at the Universities, the teaching of Science, Medicine, Engineering and Agriculture in the national languages has tended to lag behind. This situation will be corrected. It is also clear that emphasis should shift from pure Arts courses to combinations that are more directly related to the needs of a developing country.

The programme of education for the next five years will give high priority to the following elements :—

(*a*) The development of the curricula required for changes envisaged in the education system ;

(*b*) The phased introduction of the new curricula commencing from Grade VI in 1972 ;

(*c*) Upgrading of schools throughout the country to remove the imbalance in the distribution of educational facilities and equipping selected schools in the regions to develop and adapt the curricula and teaching material to implement the changes ;

(*d*) Intensive teacher-training and in-service training to equip the present cadres for improving the quality of education at the primary and secondary levels ;

(*e*) Special programmes for expanding and improving the teaching of English as a second language, and the establishment of a separate training college for training of English teachers ;

(*f*) Diversification of higher education by enlarging the scope of applied studies which are specially relevant to the country's development needs.

The programme of investment during the next five year period is given in the Table below :

Table 1

CAPITAL EXPENDITURE ON EDUCATION 1972–76

	1972	*1973*	*1974*	*1975*	*1976*
1. General Education	21·5	22·2	22·7	23·3	24·0
2. Teacher Training	1·5	1·3	1·8	2·2	2·4
3. Technical Education	8·3	8·2	8·7	9·2	9·3
4. Research and Development	·8	1·0	1·0	1·0	1·0
5. Universities	9·0	14·0	14·5	15·0	15·0
6. Other Investments	1·4	2·3	2·3	2·3	2·3
Total	42·5	49·0	51·0	53·0	54·0

These investments take into account the expansion of school facilities in relation to the increase in the school-going population as well as the qualitative improvements that are planned through the radical changes envisaged in the curricula.

B—HEALTH

Introduction

During the past thirty years, substantial investments were made in the development and improvement of the health services. The present share of public expenditure on health services amounts to about 2 per cent of the estimated gross national product and about 7 per cent of total government expenditure. The following general indicators reflect the remarkable improvement in the health of the population over the years :—

—the crude death rate has declined from 20·3 per thousand of the population in 1946 to 7·9 per thousand in 1968 ;

—maternal mortality has decreased from 15·5 per thousand live births in 1946 to 1·8 per thousand in 1968 ;

—infant mortality has fallen from 141 per thousand live births in 1946 to 50 per thousand in 1968 ;

—expectation of life at birth has increased from 44 for males and 42 for females in 1946 to 65 and 67 respectively in 1968.

Present Deficiencies

Though statistically impressive, the health services in the country still suffer from a number of deficiencies. The emphasis hitherto appears to have been on the provision of curative services while the preventive services have not been adequately developed and expanded. For instance, supplies of water suitable for drinking and domestic purposes are available only to less than 20 per cent of the total population, while the rest have to obtain their supplies from unprotected wells, springs, tanks and rivers open to contamination. Today, nearly 40 per cent of all morbidity cases in the country and about 30 per cent of the diseases receiving indoor treatment in public medical institutions have their origin in poor environmental sanitation.

Over-crowding of large hospitals and under-utilization of smaller medical institutions have become a characteristic feature of the curative services in Ceylon. Though the country is studded with a network of medical institutions, the smaller units are neglected

in favour of the larger institutions. Specialist facilities are concentrated in the provincial and base hospitals which are situated in urban areas while these facilities are not provided in the district hospitals which are more accessible to the vast majority of the rural population. This factor, together with the demand for more and better care has resulted in over-crowding of provincial and base hospitals, in under-utilization of other smaller medical institutions, and in poor outpatients' services. The result, on the one hand is that at present about 60 medical care institutions are over 50 per cent over-crowded while on the other about 100 hospitals have under 50 per cent bed occupancy rates. Attendance at the larger hospitals is very high, some provincial hospitals recording as much as 1,500 to 3,000 out-patients per day. A recent report on the country's health services has made the following comment: " Today great crowds completely overload the outpatient's departments of larger hospitals, where doctors and apothecaries, sometimes four or more in a room, can give only the briefest consultations, examinations and advice, and must be constantly on the alert to detect the serious case and the emergency among the relatively trivial illnesses. The pressure of work is such that there is little time for thorough investigation and treatment of outpatients, and patients are often admitted to the wards for conditions which, if there were more time could well be treated on an outpatient basis. "[1]

In-patient services have also been subject to heavy pressure and the occupancy rates in the provincial and base hospitals have increased rapidly during the past several years. Table I presents the figures on over-crowding at provincial and base hospitals.

A substantial proportion of the hospital beds are occupied by patients suffering from diseases that can well be treated at outpatients' departments. Further, although about 90 per cent of all ailments could be adequately cared for by a general-practitioner service, the demand for treatment by specialists leads to a shortage of beds in the larger hospitals. It has also been found that patients are kept in wards for longer periods than are necessary due to inadequate operating theatre facilities or inadequate facilities for pathological investigations and X'ray examinations. This increases the average length of hospital stay of patients.

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[1] Hood, W. D., " Hospital Planning and Administration in Ceylon "—Assignment Report, W.H.O.

Table 1

OVER CROWDING IN PROVINCIAL AND BASE HOSPITALS

1	*2*	*3*	*4*	*5*
Name of Hospital	*Bed Strength as on 30.11.68*	*Total No. of in-patients treated during 1.10.68 to 30.9.69*	*Average daily sick*	*Percentage Col.4. × 100 / Col. 2*
1. Provincial Hospitals	6,974	420,138	8,452	121
2. Anuradhapura	625	35,526	778	124
3. Badulla	520	32,510	787	151
4. Batticaloa	477	17,559	490	103
5. Colombo North	670	42,098	745	111
6. Colombo South	575	45,663	617	107
7. Galle	633	44,690	739	117
8. Jaffna	912	42,521	923	101
9. Kandy	1,131	69,065	1,305	115
10. Kurunegala	800	47,568	1,226	153
11. Ratnapura	631	42,938	844	134
12. Base Hospitals	3,472	246,661	4,202	121
13. Trincomalee	215	12,506	214	100
14. Nuwara Eliya	175	7,591	135	76
15. Negombo	267	28,643	518	194
16. Gampaha	283	26,712	414	146
17. Point Pedro	210	9,070	184	88
18. Kalutara	530	37,910	626	118
19. Kegalle	478	33,397	507	106
20. Matale	372	21,512	478	128
21. Polonnaruwa	144	11,767	145	101
22. Matara	317	27,381	392	124
23. Chilaw	296	22,795	412	139
24. Mannar	185	7,377	179	97
25. Colombo Group of Hospitals	4,640	180,612	4,612	99

The provision of dental services has been affected by a shortage of qualified dental surgeons. The lack of adequate facilities has also resulted in work in several departments like prosthetics, orthodontics, and conservation falling into arrears. On the

preventive side, the most important programmes are those for pre-school children and the school dental service designed to provide regular treatment for school-going children between the ages 5 and 13. Owing to a shortage of dental surgeons and dental nurses, it has been possible to provide these services only to about 120,000 out of an estimated 3,900,000 children aged 2½ to 13 years.

Health Programme

PREVENTIVE SERVICES

Increased attention will be paid to the development of the preventive health services during the Plan period. At present there are 98 health units forming the network of public health services in the country. Though originally designed to cover a population of about 50,000, today each of the health units serve a population of approximately 80,000 to 120,000. Additional health units are required to provide a satisfactory preventive service. In view of the limited financial resources and the insufficiency of trained personnel, additional units will be set up on a system of priorities.

Health education is a field where the returns to investment are extremely high. In the past, the health education programmes were organised with a view to teaching the people the elementary rules relating to hygiene and public health. These programmes, however, were not designed to meet the specific health problems of different areas. It is now proposed to step up the health education programme to meet the particular health needs of the people in the various regions and also to enable all categories of personnel in the health services to participate in the programme. The school system will be further utilized for carrying out health education among children and to stimulate an interest in healthy living in their neighbourhood.

Incomplete coverage in immunization programmes relating to poliomyelitis, whooping cough, diptheria, tetanus, tuberculosis and smallpox has led to an increase in morbidity and mortality which could have been prevented. Measures will be taken to ensure that all children are immunised before they reach their first birthday.

In Ceylon, the chief cause of maternal deaths is anaemia due to malnutrition, and the chief cause of infant mortality is pre-maturity which is also mainly due to maternal anaemia. Action has been taken to issue milk and dietary supplements at ante-natal and child

welfare clinics to improve nutrition levels. It is proposed to re-organise the national milk feeding scheme. With a view to preventing adulteration and contamination, dry milk instead of fresh milk will be issued to all lactating mothers and to the children. This step will also reduce the cost of administration and distribution.

The provision of pipe-borne water supplies and sewerage is a part of the programme to improve preventive health services. The new programme of the Department of Water Supply and Drainage that will be undertaken during the plan period is given in Table 2. It is proposed to construct water supply schemes in 100 rural areas during the next five years at an estimated cost of Rs. 22 million. Work will also commence on a major programme of improvement and expansion of water supplies to the Greater Colombo area. During the plan period schemes for other important urban areas will be considered for implementation on a basis of priority.

Further, a phased programme is being undertaken to provide on a priority basis pipe-borne water and sewerage to major medical institutions that do not have these facilities. At present the Department of Health Services operates a scheme designed to encourage the construction of latrines in the rural as well as urban areas. Due to a number of reasons, the funds allocated for this scheme have not been fully utilized. Through intensive health education, by increasing government assistance and by enlisting the active participation of the community it is proposed to increase the effectiveness of this programme.

CURATIVE SERVICES

As mentioned earlier, over-crowding at base and provincial hospitals and related problems such as shortages of drugs, equipment and trained personnel have affected the quality of the curative services. The policy during the Plan period will be to expand and up-grade the district hospitals and peripheral units by providing them with additional beds, improved facilities and specialist services. It will also be necessary to provide during the next five years additional operating theatres to the provincial and base hospitals where these facilities are inadequate at present. Action will also be taken to increase the medical and para-medical staff at the out-patients' departments. Further, steps will be taken to implement more effectively the system whereby patients could be referred by the

Table 2

APPROVED WATER SUPPLY SCHEMES

Project	*Estimated cost Rs.*	*Project*	*Estimated cost Rs.*
Projects in South-West Coastal Area		**Rural Water Supply Schemes**	
Galle	21,600,000	(*a*) *U.N.I.C.E.F. Financed*	
(Kelaniya to Hendala) Stage I	26,200,000	100 Rural Schemes	22,000,000
Ambalangoda	4,900,000		
Kalutara—Stage I	13,300,000	(*b*) *Other Schemes*	3,000,000
Total	66,000,000	Rakwana	
		Weraduwa	
Urban Water Supply Schemes		Elpitiya	
Weligama	2,400,000	Mawathagama	
Welmadulla	550,000	Mudunekada	
Samanthurai	1,340,000	Udukumbura	
Ruwanwella	975,000	Nelundeniya	
Veyangoda	2,900,000	Wariyapola	
Gampola	1,430,000	Narammala	
Balangoda	1,650,000	Hiripitiya	
Ratnapura—Stage I	7,600,000	Pussellawa	
Bandarawela	1,850,000	Talahena	
Hambantota (Augmentation)	3,300,000	Araly South	
Batticaloa	2,125,000	Araly North	
Polonnaruwa	5,260,000	Nainativu	
Kilinochchi	2,950,000	Baswatte	
Amparai—Stage II	3,490,000	Pundalu Oya	
Rambukkana	1,130,000	Karainagar	
Kurunegala	13,000,000		
Kehelwatte	2,150,000		
Hingurakgoda	2,500,000		
Peliyagoda	1,200,000		
Mawanella	2,200,000		
Total	60,000,000	Total	25,000,000

smaller hospitals to larger hospitals for urgent and special treatment. Similarly, patients could be transferred from larger hospitals to smaller hospitals for convalescence. Additional ambulances will be provided for this purpose. The fleet strength will be increased from the present 126 to 200 by 1976. In addition, arrangements wil be made for specialists to visit the peripheral institutions to enable the rural population to benefit from their services.

During the Plan period the ayurvedic services will be developed by concentration on medical education, research and the expansion of curative services.

The mental health services in the country have to be improved and expanded. At present, there are three special institutions and a few psychiatric wards in some provincial and base hospitals. It is proposed to establish psychiatric units in all provincial hospitals and some base hospitals during the Plan period.

Facilities for cancer therapy are at present available only at the Cancer Institute, Maharagama. Cancer units will be established at Kandy and in other outstations according to regional needs.

Blood banks are now available only in the provincial hospitals. As far as possible blood banks will be established in all base hospitals during the next five years.

Pilfering, indiscriminate prescribing, and wastage of drugs still remain major problems. It is proposed to introduce a system of medical audit to check these abuses. A Pharmaceutical Products Corporation has been set up to import and manufacture drugs.

INTEGRATED SERVICES

At present, the curative and preventive services function as two separate entities. This division has often resulted in an unnecessary duplication of services and affected adversely the development and improvement of the health services. Steps will be taken to integrate the two services on the results of the pilot project which is now in operation.

DENTAL SERVICES

It is proposed to set up 50 additional dental clinics during the Plan period at the rate of 10 new clinics per year. In addition, 52 school dental clinics and 20 other clinics for school-going children between 13 and 18 years will be set up under the joint responsibility of the respective parent-teacher association and the Ministry of Education.

LABORATORY SERVICES

At present, there are pathologists in all provincial hospitals. However, only five of the twelve base hospitals have been provided with the services of pathologists. With a view to improving the laboratory services as well as reducing congestion, it is proposed to appoint pathologists to the rest of the base hospitals during the Plan period. It is also intended to improve the quality of the laboratory services by appointing bacteriologists to the provincial hospitals.

The services of radiologists are available in all provincial hospitals. Though the base hospitals are provided with X'ray facilities, radiologists have not been appointed to these institutions. X'ray photographs have to be sent to the nearest provincial hospital for report or await the visit of a radiologist from the provincial hospital resulting in longer bed occupancy and delay and inconvenience to patients. During the Plan period radiologists will be appointed to all base hospitals.

POPULATION POLICY

Family planning work covering the entire population of the country is a routine activity of the Ministry of Health and is integrated with its maternity and child welfare programme. The significance of family planning as a health measure has not received sufficient attention in the past, especially the effect of excessive child bearing on individual and family health and welfare. In Ceylon, as in other developing countries, the largest number of births is among mothers from low-income families. According to the Socio-Economic Survey of 1969/70 it was estimated that, of the mothers who had five or more children, as many as 63 per cent were in households with an income less than Rs. 200 per month. Frequent and ill-spaced pregnancies undermine the health of the mother. A high birth rate in the context of low standards of living and malnutrition can lead to a general deterioration in the health of the population and to an increase in the incidence of disease and to a rise in infant mortality.

It is essential therefore that facilities for family planning should be made available to all groups in the population and not be confined to the privileged sections of society.

The rate of population growth has important implications for development policy. High birth rates have an effect on the age-structure of the population. Of every 100 Ceylonese, 41 are under 15 years of age. In the developed countries the number of children under 15 years forms only about 22 to 30 per cent of the total population. The present age-structure means that childhood dependency in Ceylon is very heavy with about 72 child-dependants for every 100 persons of working age, in contrast to about 35 to 40 in the developed countries. If the population were to grow at the current high rates, the burden of dependency will also continue to be heavy. The high proportion of dependants in the total population will effect the rate of investment as well as its composition.

The size of Ceylon's future population depends on changes in fertility. The total number of births in Ceylon has been averaging about 370,000 per year during the past ten years. Of these births, as much as 76 per cent have been to mothers in the age group 20 to 34 years. Therefore, one of the crucial factors that will determine the size of future births will be the number of women in this age group. It is estimated that this number will increase from 1,467,000 in 1971 to 1,991,000 in 1981 or by about 36 per cent. If existing family patterns continue, then the number of births per year will correspondingly increase to about 505,000 in 1981. This is well over the present figure of about 370,000 births per year. Even the present level of births has led to a heavy strain on the country's resources. In the circumstances the importance of family planning work cannot be overemphasized.

Activities connected with family planning have been carried out in Ceylon by the Family Planning Association from 1953 and by the Ministry of Health from 1965. But what has been done so far in this field appears to be insignificant in relation to the magnitude of the problem. Today family planning work is carried out only in about 40 per cent of the maternal and child welfare centres in the Island, and this too in complete isolation from the ante-natal and post-natal activities of these centres. Provision has been made for the establishment of family planning clinics integrated with maternal and child welfare work in all the centres throughout the Island.

C—HOUSING

Housing policy during the Plan period is framed to expand the State's provision of low-cost housing for the lower-income groups and to provide increased facilities for people to build their own houses individually as well as through housing co-operatives. In order to maximise the number of housing units built with the available resources, incentives will be given for the building of low-cost houses. The construction of luxury houses will be discouraged through appropriate disincentives. The Public Sector Housing programme will include low-cost housing schemes in urban areas and the provision of basic amenities to slum and shanty dwellers. In addition, funds will be channelled through Divisional Development Councils to stimulate house building activity in the rural sector.

The financial resources which will be available for new housing both in the public and private sectors is estimated at about Rs. 500 million in 1972 rising to about Rs. 625 million in 1976.

The following range of incentives will be provided in order to increase the rate of house construction :

—making land available on easy payment terms ;

—providing building sites in housing estates with basic amenities such as water service, electricity and roadways ;

—clearing of title to land ;

—increasing the funds available for housing loans ;

—sponsoring of housing co-operatives which will be provided with loan facilities and technical services.

Land for building

One of the major obstacles facing house-builders is the shortage of land at reasonable prices. The Government will set up a Housing and Land Trust with the object of acquiring and holding available land for the purpose of expanding public housing and resale to prospective house-builders. This is expected to overcome the principal obstacles facing builders, namely, defective title, uneconomic use of available land, non-utilization of available land and spiralling of land prices. In addition to the land reclamation schemes which are in progress in Colombo, the possibilities of reclaiming marshy lands at Gothatuwa, Kotte and Hendala are being examined. New areas will be opened for house construction by providing the

necessary infrastructure, roadways, electricity and water. Under the existing law, a minimum extent of 15 perches is required in certain areas to construct a dwelling. Steps have been taken to relax this restriction.

Supply of Materials and Services

A Building Materials Corporation has been set up to rationalise and facilitate the supply of materials to house-builders and to stimulate the production of building materials from indigenous raw materials. Builders often incur unnecessary expenditure and experience considerable difficulty and delay in getting building plans and bills of quantities drawn up and in obtaining approval from the local authorities. As a remedial measure, the Ministry of Housing and Construction will provide builders with standard building plans and bills of quantities and technical advice.

Housing Loans

The annual allocation to the National Housing Fund will be increased to Rs. 40 million which is double what it receives at present.

Co-operative Building Societies

Prospective house-builders will be encouraged to organise their land acquisition and building activities in co-operative societies. Ten or more persons who either own land within a manageable area of operation or who wish to acquire land individually or jointly in the area through a central agency could become shareholders in a co-operative society. The capital of such societies will consist of members' shares, savings deposits and borrowings from sources such as Government and banks.

Public Sector Housing Programme

Besides the above measures to enable people to build their own houses, the following public sector programmes will be undertaken.

URBAN LOW-COST HOUSING

Several housing programmes are being currently implemented by the Ministry of Housing and Construction as an immediate measure towards relieving the housing shortage. Approximately 2,500 low-cost dwelling units at a total estimated cost of Rs. 12·5 million are being constructed in urban areas and the scheme is phased over a period of two years. Table 1 provides details of this project.

Table 1

CURRENT PROGRAMME OF LOW-COST HOUSING

No.	*Name of Scheme*	*Estimated Cost Rs.*
1.	Maligawatte—Stage II	450,000
2.	Maligawatte—Stage III	570,800
3.	Juwanpullegewatte—Stage I	571,000
4.	Uswatte—Stage I	491,000
5.	Wanathamulla—Stage I	665,000
6.	Siripura—Stage I	729,000
7.	Ratmalana—Stage I	840,000
8.	Mahawatte—Stage I	889,920
9.	Gurunagar Housing Scheme	460,000
10.	San Sebastian Housing Scheme	1,000,000
11.	Steuart Street Housing Scheme	1,700,000
12.	Anuradhapura Housing Scheme	420,000
13.	Kamburupitiya Housing Scheme	525,000
14.	Badulla Housing Scheme	420,000
15.	Ragama Housing Scheme	700,000
16.	Galkissa Housing Scheme	375,000
17.	Matara Housing Scheme	280,000
18.	Ratnapura Housing Scheme	375,000
19.	Balangoda Housing Scheme	375,000
20.	Other expenses	663,280
	Total	12,500,000

Another low-cost housing programme consisting of 3,300 units spread over several urban areas and costing Rs. 28 million is scheduled for the Plan period and will commence in 1972. Details are in Table 2.

Table 2

PROGRAMME OF LOW-COST HOUSING

No.	*Name of Scheme*	*Estimated Cost. Rs.*
1.	Juwanpullegewatte, Stage II	585,000
2.	Uswatte, Stage II	775,000
3.	Mahawatte, Stage II	1,040,000
4.	Ragama, Stage II	420,000
5.	Maligawatte, Stage II	310,000
6.	Ratnapura, Stage II	450,000
7.	Ratmalana, Stage II	1,000,000
8.	Crow's Island	1,200,000
9.	Vekunagoda, Stage I—Galle	1,000,000
10.	Ayagama—Ratnapura	420,000
11.	Jayantha Weerasekera Mawatha Flats	2,800,000
12.	Galkissa, Stage II	450,000
13.	Borella Flats	1,500,000
14.	Stace Road Housing Scheme	490,000
15.	Narahenpita Housing Scheme	420,000
16.	Jaffna	490,000
17.	Pallekele—Kandy	420,000
18.	Kekirawa, Stage I	420,000
19.	Peliyagoda Housing Scheme	350,000
20.	Kotte, Stage I	475,000
21.	Ratnapura Town Housing Scheme	200,000
22.	Galle—Dodanduwa	175,000
23.	Badulla Town	420,000
24.	Slave Island Flats	1,250,000
25.	Kettarama, Colombo	200,000
26.	Walpita, Akuressa	365,000
27.	Galle—Ratgama	350,000
28.	Kankesanturai	420,000
29.	Ratnapura—Collins Cresent	350,000
30.	Ranwella, Kegalle	420,000
31.	Panadura	380,000
32.	Mandawela—Dompe	420,000
33.	Homagama	350,000

PROGRAMME OF LOW-COST HOUSING—(*contd.*)

No.	*Name of Scheme*	*Estimated Cost Rs.*
34.	Yatinuwara Stage I	500,000
35.	Haputale	275,000
36.	Beliatta	350,000
37.	Ambalangoda	400,000
38.	Priyadarshana Mawatha, Colombo	1,150,000
39.	Price Park Re-development Scheme	1,500,000
40.	Bloemendhal—Colombo North	1,800,000
41.	Pelmadulla	275,000
42.	Kolonne	250,000
43.	Self-Help Rural Housing Schemes including Workers Estates	1,185,000
	Total	28,000,000

In addition, the Department of National Housing will continue a programme of construction of flats in Colombo and its suburbs.

RURAL HOUSING

With regard to rural housing, the current level of government investment is Rs. 12 million per year for house construction through the Divisional Development Councils. This level of investment is expected to rise annually with the Organisation of housing Programmes in the Council areas. The rural housing programme has high priority. It is a means of mobilising savings and diverting a portion of the increase in rural incomes to investment on housing in the rural sector. It will generate a demand for building materials, furniture, and other local products which will promote industrial activity in the rural areas. It will also create employment opportunities.

Slums, Tenements and Shanties

The acute housing problem of low-income households in the city manifests itself in the rapid proliferation of shanties and the growth of slum areas. During the Plan period high priority will be given to ameliorating this situation. In the first instance, it is proposed to re-house a part of this population in low-cost housing schemes. While slum clearance will be undertaken as part of a long-term programme, steps will be taken during the Plan period to improve living conditions in slum areas by providing basic amenities such as adequate sanitary facilities, stand pipe water supplies and electricity.

CHAPTER 8

PLAN IMPLEMENTATION

THE previous chapters have set out in outline the investment policies and production targets in different branches of activity. In overall terms, having regard to the growth potential in each sector the targets that have been set are well within the limits of available resources. The present chapter describes briefly the organisation and the institutions that are considered necessary in order to carry out these tasks. In doing so, the specific roles of the different groups in society such as the workers, the agriculturists, the administrators, the engineers, the technicians, the businessmen and the politicians would also become clearer. For this purpose, the task of plan implementation is discussed under the following heads :

—The small-scale sector ;

—Public Sector Enterprise ;

—The Private Sector.

The Small-Scale Sector

The success of the Plan depends on an unremitting effort to upgrade productivity in small-scale agriculture and industry. For example, increases in production in paddy, cotton, subsidiary food crops, manioc, passion fruit and pineapple will depend on the skill and productivity of the small farmer. An increase of output in coconut, and to some extent in rubber, is contingent on the success with which the small-holders are organised. A significant share of the increase in industrial output during the Plan period will come from the small-scale sector. Among the factors which are important for the development of the small-scale sector, the following should be mentioned :—

The strength and capacity of the government agencies which service them ;

The institutions for self-management and co-operation among the small producers.

The network of servicing institutions in respect of each programme must undertake a well defined range of functions. These would include :

—Extension services which transmit the technical know-how and the results of research to the small producers ;

—Credit facilities ;

—Organisation of the supply of inputs—planting material, fertilizer, equipment for agricultural operations ;

—Marketing of produce.

In the new crop programmes it will be necessary to establish agencies for a single crop or a group of crops which will co-ordinate all the above functions and operate on the lines of an integrated development agency. This would be necessary not only in new programmes such as agro-industries, but also in the case of the traditional crops.

The small producers themselves would have to be organised for collective and co-operative effort to make the best use of the available services. This would require a much more effective co-operative movement than in the past. Active participation of small producers will be required in the formulation of seasonal and annual programmes.

The success of this part of the Plan will depend on the transformation of the primary co-operative society. At present the co-operative is mainly a retail outlet for imported consumer goods. It must in the coming period play a much more dynamic and aggressive role. It must assume the role of a development agency which will diversify the rural economy and create new points of growth in the village. Furthermore, the co-operative must not only be a seller of goods but also a buyer. Today it enters the market as a buyer of produce mainly for the purchase of paddy under the Guaranteed Price Scheme. The range of its activities could be expanded to cover nearly all the marketable produce of a village. If productivity in the rural sector is to be increased at all it is essential to organise facilities for the marketing of produce. One of the main obstacles to rural economic development has been the absence of such facilities which has left the small producer to the mercy of the middleman or petty trader.

The institutional base for activating the small-scale producer is already in the process of being established. The primary co-operative society has been reorganised and enlarged into a viable unit. The Industrial Development Board is being reorganised to provide extension services for small industry on a regional basis. The People's Bank will, through a wide network of branches, provide credit facilities for the rural sector. In addition, a scheme has been formulated to attach a rural credit branch to each primary co-operative society. These will be financed and supervised by the People's Bank. Special agencies for the development of particular crops and commodities are being established to co-ordinate policies, production programmes and connected activities. Examples are the Livestock Board, the Coconut Development Authority and the Fruit Board. The Territorial Engineering Service has been organised for undertaking construction activities in the districts and divisions.

In all these programmes the district administration will be the focal point of plan implementation. The diverse activities of the different government agencies will have to be effectively co-ordinated at the district level. In the district, the major development agencies will be the Department of Agriculture, the Department of Irrigation, the Industrial Development Board, the Territorial Engineering Service, the Co-operative Department and the Department of Agrarian Services. A large number of other government departments and agencies will support this effort. The activities of these numerous agencies will be harnessed towards the single purpose of overall national development. It has to be emphasised that the development effort in the village depends entirely on the proper functioning of these interrelated activities. It is, therefore, necessary to appraise their performance continually and to make the changes that might be necessary in the light of experience.

Responsibility for the co-ordinating function at the district level will be vested in a District Development Committee and the Government Agent will be the principal officer for plan implementation and progress control in the district. In implementing the regional component of the national plan the Government Agent will be responsible both to the relevant Ministries and to the Ministry of Planning and Employment. To facilitate this work, Planning Offices will be set up in each district.

However, it is not only the responsibility for plan implementation that will be decentralised. Through the District Development Committees and the Divisional Development Councils it is proposed also to decentralise the work of plan formulation. Special allocations of funds for capital expenditure will be made on a district basis.

In drawing up programmes of regional development the district and divisional organisations will play a major role. The Divisional Development Councils will be the main link between the network of government agencies on the one hand and the local community and its representative institutions on the other. The Councils consist of government officials and of representatives of institutions such as the co-operative societies, cultivation committees, Peoples' Committees and the Village Committees. The function of these Councils includes the formulation of development projects and the preparation of a development programme for their areas. They will also assist in the co-ordination of development activity and the review of plan implementation in the Development Council areas.

The Divisional Development Councils were set up at the beginning of 1971 and have been functioning for some time. The indications are that they can go a long way to securing popular participation and popular interest in the development effort. A large number of small-scale agricultural, industrial and infrastructure projects have been formulated by these Councils and many of them have already been started.

The arrangements for plan implementation described above represent a considerable decentralisation of responsibility both for formulating plans for regional development and for their implementation. This corresponds to Government's decision to decentralise the entire administrative structure. Steps are being taken to increase the number of DRO's divisions and to delegate some of the functions now attended to at the Kachcheries to these new administrative units. This will not only reduce the inconvenience experienced by the public in their transaction of business with the Government but also help the development effort.

Public Sector Enterprises

A necessary corollary of the country's commitment to the building of a socialist society is the expansion of the public sector of economic activity. A socialist economy must rely heavily on the surpluses or profits generated by public sector enterprises for the savings necessary for further investment. This is a clear lesson from the experience of all countries which have taken the socialist road to development. In this context, the performance of public sector enterprises and the size of the surpluses that they generate become crucial to the successful implementation of the Plan.

The public sector enterprises are required to make a major contribution to the attainment of the plan targets. A large part of the increase in production during the Plan period will come from better utilization of installed capacities in the public sector. The under-utilization of existing capacities has been due to raw material shortages, market limitations and to failures of management and workers at all levels. Problems of under-utilization have been most severe in enterprises such as the textile factories, the two sugar factories, the steel factory and the tyre factory. The inadequate performance of some public enterprises in the past is attributable to a variety of factors of which the most significant are the selection of personnel for the directorates, labour-management relations, lack of adequate management and technical expertise within the organisation, pricing policies which yielded low returns on investments, and also the tendency to recruit more personnel than was warranted by the level of output. The success of public sector enterprises during the Plan period would therefore depend on a concerted attack on all these shortcomings.

The upgrading of the quality of management within the Corporations will be undertaken systematically. The weak units in the public sector will be selected for special programmes of efficiency improvement. For this purpose, institutions such as the Management Development and Productivity Centre will be utilized.

However, if the public sector is to fulfil the targets of the national Plan it is necessary above all that the working community at each enterprise should be collectively committed to the social objectives

of the enterprise. The machinery already exists for worker participation in management. These will be further strengthened. Organisations such as Employees' Councils will be associated closely in production planning and cost and progress control so that the employees as a whole are committed to the achievement of plan targets.

Two major shortcomings have become evident in public sector construction agencies. They have been unable to complete the projects on planned time-schedules. Major projects such as Uda Walawe, the Thulhiriya Textile Mill and the woodworking complex at Avissawella, have fallen far behind target dates originally fixed for their completion. These construction delays have also led to a steep escalation in project costs. A large number of major projects have to be completed during the Plan period. These include the Fertilizer Plant, the new Textile Mill, the Uda Walawe project, the two stages of the Mahaveli project, the Maskeliya Oya project and the Samanalawewa power project. Most of these will be undertaken by state construction agencies. Concentrated work has to be done both at Uda Walawe and Mahaveli, which will account for a major portion of the new irrigable land. The resources in terms of manpower and equipment to undertake this work are not major constraints. The major problem has been the management and organisational capacity within the agencies which have in most instances been below the desired level. During the Plan period the increase in the tempo of construction activity will require a much higher level of management performance in the state construction and development agencies.

The successful completion of the construction and development programmes would depend on four or five key agencies—the State Engineering Corporation, the Mahaveli Development Board, the River Valleys Development Board, the State Construction and Development Corporation and the Buildings Department. The distribution of the work load among these agencies and the deployment of personnel will be co-ordinated and the necessary organisational improvements effected to equip these agencies for their programme of work.

The Private Sector

The private sector will play a significant role in the Plan in overall terms. The implementation tasks to which the private sector has to organise itself fall into four main categories :

—The level of efficiency in the estate sector has to be improved. In tea, output has declined from 503 million lbs. in 1965 to 468 million lbs. in 1970. The objective in the Plan is to increase output to 550 million pounds per year. This would require a major reversal of past trends. The achievement of this target depends on a substantial improvement in the level of maintenance of the estates and the modernisation of factories. The use of fertilizer has to be increased. In rubber, the rate of replanting has to be increased from its current level of about 10–12 thousand acres per year to as much as 15,000 acres. In coconut, the average yield has to be increased from around 2,200 nuts per acre to about 2,800 nuts.

—In manufacturing, in addition to meeting domestic requirements, the private sector would be required to contribute in a major way to the creation of a new export sector.

—The success of the tourist programme relies heavily on the enterprise of the private sector.

—The other major field of investment in the private sector will be housing construction.

The activity of the private sector is reflected in the Plan as an indicative forecast for which appropriate policies, incentives and fiscal measures are designed to provide the necessary inducements to the private sector to fulfil its role. The development objectives and five-year targets of production, and the annual programmes for the major branches of activity in the private sector will be spelt out in some detail. National agencies will lay down the broad framework of policies and targets within which this sector should operate. In the case of tea, the Tea Board will perform this function. In the case of coconut, there will be a Coconut Development Authority. The Tourist Board will promote and direct the growth of tourism. The Sectoral Boards will co-ordinate the activities of public sector and private sector production units in all major branches of industry. The Export Promotion Council will direct the export drive and encourage the creation of new export industries.

Implementation

While the Plan provides a framework of national policies and targets, its implementation requires more specific and detailed short-term programming. For this purpose, detailed annual plans will be prepared. The annual plan will also contain overall targets of public and private expenditure and a foreign exchange budget. The resources available in relation to a short-term forecast of government revenues, export earnings, import requirements will be estimated and a national economic budget formulated for the implementation of the annual plan. For the preparation of effective programmes of implementation, the administrative and organisational capacity available will be measured against the demands of the Plan, and annual implementation programmes will be prepared for every important component of the Five Year Plan. These will be used for progress control and the evaluation of performance.

This chapter has highlighted the magnitude of the effort involved in reaching plan targets. A continuous improvement in the managerial, technical and other skills within public sector organisations will be necesary during the Plan period. In government departments themselves, development administration will demand professional skills and a new orientation, for which in-service training of an intensive character will have to be imparted. To achieve all these objectives, various training institutes such as the Management Development and Productivity Centre, the Administrative Academy, the Agrarian Research and Training Institute and the Co-operative Management Training Centre will co-ordinate their programmes, in terms of a comprehensive plan for management development and improvement of skills in order to provide personnel with the right outlook and training to carry out their tasks.

The Plan will also generate additional demand for technical skills and specialities in the numerous industrial and agricultural programmes that will be undertaken. Extei sion and research activities for the various crops will require t ained personnel in entirely new areas for which the skills in the required quantity and quality do not exist at present. Some of the training programmes

in the past geared to post-graduate research with limited relevance to the country's problems will have to be re-oriented to provide specialised personnel specifically trained to deal with the problems in the field and in the factory.

The emphasis on the small-scale sector, and the level of technology assumed in the Plan will call for an acceleration of research effort in numerous small-scale projects which together could have a significant impact on indigenous technology. Major areas of research will be identified in terms of specific projects, and both the activities of the local research institutes and the foreign technical assistance schemes will be co-ordinated in a five-year programme.

Institutional arrangements will be made for the evaluation of performance at periodic intervals. The progress on the Plan in all sectors will be reviewed regularly at all implementing levels. For this purpose, the present system for the flow of information on the progress of various Government programmes will be strengthened. Progress control will ensure that every agency responsible for the implementation of any element in the Plan will supply information regularly to the next level of supervision and evaluation. Quarterly reports based on the information will be examined regularly by the Prime Minister and the Cabinet Planning Committee and corrective action taken where programmes are behind schedule.

Sectoral committees have been set up in the Ministry of Planning whose function will be

to review Plan performance :

to formulate corrective measures where necessary ;

to adapt programmes and policies to changes in the economic framework ;

to prepare long-term programmes of development.

These committees will work in close collaboration with the Planning units in the different Ministries.

Conclusion

The ultimate responsibility for making a plan rests with the government. Similarly, it is the government's responsibility to ensure that the necessary institutions and services are available for the purpose of carrying through the Plan. As far as the Government is concerned its social and economic policies and its financial outlays in successive years will be contained within the framework of the Five Year Plan, and the Government's entire energies will be geared to the fulfilment of the Plan targets. However, the successful implementation of the Plan depends on the people—on the co-operative effort of thousands of individuals throughout the length and breadth of the country, the persons working in our fields, worksites, factories, schools and offices who have to make their contribution day in and day out to the tasks that flow directly from the Plan targets. It is the sum total of such efforts which will go to form the national achievement during the next five years. In this context, the total commitment of the nation as a whole to the objectives and targets of the Plan is a pre-condition for its success.